ADVENTURES OF FUTURE SCIENCE

WONDER Stories

March

HUGO GERNSBACK Editor

"CHILDREN OF THE RAY"
by J. Harvey Haggard

25¢

SELL THIS $7.50 PURSE

NRA MEMBER U.S.
WE DO OUR PART

Size closed 6½x9½ inches.

FOR ONLY $3.95

Every woman wants a new "MISS AMERICA" handbag—that unique style and service creation by Halvorsen—*the man who spent a lifetime studying leather.* Mail coupon today for details about free sample offer and profit plan.

FULL OR SPARE TIME

It makes no difference whether you use full or spare time on this new enterprise of yours. The main thing is to take hold now and not let these extra dollars get away from you.

EARN FROM $3.00 to $10.00 DAILY

PAID-IN-ADVANCE COMMISSIONS

An easy and pleasant way of earning money. With our order book and catalogue serving as your credentials, deposits (your commissions) are gladly paid and your profit is made on the spot. The guarantee of delivery to the customer is made by a house 27 years old, so there are no questions.

NO EXPERIENCE NECESSARY

That you have never sold before need not deter you from starting. Imagine, please, the amount of ladies' handbags that are sold in this country. What an enormous supply of prospects. And here is a bag that would sell for much more money in the stores if they could be had. Rush your coupon today whether or not you have had experience before.

POSITIVELY NOT SOLD IN STORES

I guarantee that these bags are not sold through stores. You know what that means. You are in a business of your own — in a position to make money without investing a red cent. Your time is all, and if you take hold of this thing right you can make that worth a dollar an hour in a pleasant, easy manner.

STUDY THESE FEATURES:

Acquaint yourself with the following features and be in a position to answer questions when asked as a successful salesman should at all times.

(1) **GENUINE STEERHIDE**—The finest and strongest leather that can be had. Either black or brown with artistic embossed design.

(2) **DOUBLE ZIPPERS**—A feature that every woman will instantly take to. Two zipper pockets separately arranged for convenience and security.

(3) **TRIPLE FITTED**—An entirely new idea incorporating three useful features, mirror, coin purse and two-hook key case.

(4) **GENUINE 22K GOLD ENGRAVING**—To make this offer doubly attractive we engrave, in 22K genuine gold, the lady's monogram in a very artistic new manner—Also name in gold on key case and coin purse.

(5) **100% SAFETY**—The double zipper arrangement insures absolute safety. In other words, you can keep valuables in a closed pocket away from other contents.

(6) **100% PRIVACY**—Naturally by being able to keep one pocket closed all the time you have privacy, an arrangement and an idea that instantly appeals to the feminine point of view.

(7) **NOT SOLD IN STORES**—I guarantee that these bags are not sold except through my authorized representatives. Hurry and be the first one in your territory.

(8) **CHOICE OF COLOR**—Choice of either black or brown, handsome, tooled steerhide of the finest quality obtainable. Strong and at the same time soft and pliable.

(9) **SATISFACTION GUARANTEED**—There is no such thing as a dissatisfied customer if you handle my line. I would not be in business for 27 years without a reason. Your customer must be satisfied or I am not.

I GUARANTEE YOU WILL MAKE MONEY

So satisfied am I that you will not fail in this undertaking that I am going to guarantee that you will make money to start, and so as to prove this to you, if after one week or a reasonable amount of test, you find that you cannot handle "MISS AMERICA" your money will be returned to you WITHOUT QUIBBLE. Can anything be fairer?

FREE SAMPLE OFFER

You owe it to yourself to send the coupon today and get my free sample offer. It will amaze you to read it through and find that a proposition so honest and so worth while as mine has escaped your attention until now. The greatest asset for a good salesman is to handle an article he does not have to be ashamed of. Merchandise that will make him friends, so that he can come back to the same customer and be received in a friendly manner

SEND FOR DETAILS TODAY

The sooner you start the sooner you make money and as that is the main object, why hesitate? If you mail the coupon today we will send you all the facts by return mail. And to all those who have acted as my representatives for years and those I expect to enroll under my banner in 1934 I extend my best wishes for a prosperous new year.

MAIL COUPON FOR FACTS

HALVORSEN
605 West Washington Blvd., Dept. 16-1, Chicago

Send me at once full particulars about "Miss America" your profit plan, and your **free sample offer.** I am in earnest.

NAME .....

ADDRESS .....

CITY .....STATE.....

WONDER STORIES *are everywhere*— If you know where to find them!

BELIEVE It Or Not, real wonder stories are going on day and night, and right now, more wonder stories are happening all around you than you will find in the pages of this magazine.

While you are reading this, music, speech, talk, which originated perhaps 12,000 miles away from where you are, is vibrating in your body, only you don't know it.

But the short wave fraternity all over the world knows this, and for a few paltry dollars they rig up in their own homes a short wave set which brings in stations from the Antipodes. Such sets cost as low as $7.20, believe it or not. So if you are looking for real wonder stories, they are in the making right along.

How can you listen to Sydney, Australia; to Berlin, to Moscow, London, day in and day out, at practically no cost at all? Just get the catalog, which is a veritable encyclopedia of facts, described below, and you will be writing your own wonder stories.

Here are a few samples of actual wonder stories told by actual listeners:

HOW IT WORKS!

I have constructed the OSCILLODYNE RECEIVER and boy! how it works!

The first day without any trouble I received Spain, England, France, and other foreign countries. Amateurs! why I never knew there were that many until now. With the one tube Oscillodyne, I bring in more stations on one plug-in coil than with a set of coils on different short wave sets.

IF ANY ONE IS TRYING HIS LUCK ON SHORT WAVE SETS, IT WILL BE WORTH WHILE TO CONSTRUCT THIS ONE TUBE OSCILLODYNE.

PAUL KORNEKE, JR. N. S.
Pittsburgh, Pa.

FOREIGN STATIONS GALORE

It may interest you to know that yesterday, on my Doerle short wave set at 12:45. P.S.T., I heard CFH at Rio de Janeiro. They came in at 16430 Kc. and the announcing voice was as clear and strong as on an ordinary telephone.

I am using just 45 volts for both detector and audio stage on the plate. What it would do on 90 volts on the audio I do not venture to say.

At the moment 14.55 P.S.T., I am listening to phone from Japan to Hawaii. No station identification however. Around 14,000 K.C.S. KKD—Kauhuku Hawaii just identified his station.

HARRY V. DAVIS.
Penticton, B.C., Canada.

THE WHOLE WORLD

In the past two days I brought in with my Oscillodyne S-W Set the following foreign stations: 12RO, DJC (this with such volume that I was able to plug in the loudspeaker) and a French station which I was unable to identify, but I believe it to be FYA Pontoise, and also another German station which I have not been able to identify as yet.

On Wednesday RAQ was weak and noisy and DJC was loud and clear, but on Thursday the conditions were reversed. I have received many United States stations, such as W8XAA, W8XF, W8XK, W1XK, etc., etc.

In Short Wave Craft, this set was called A WONDER SET, and I certainly agree.

C. W. KNIERIM.
Hollis, L. I., New York.

Remember, you do not have to be a technician to receive stations from all over the world these days. We have solved all the technical trouble for you. Anyone can do it, and the cost is amazingly low.

Just Off the Press!

FREE NEW CATALOG . . .

1934 Edition

RADIO AND SHORT WAVE TREATISE

108 Pages • Over 100 Hook-ups
More than 1500 Illustrations

A VERITABLE TEXT BOOK ON RADIO

NOT JUST ANOTHER CATALOG

Every time a new edition of our RADIO AND SHORT WAVE TREATISE comes off the press it is an event—an event of importance to tens of thousands of our customers and friends who have been receiving them regularly for many years. YOU TOO WILL FIND IT INDISPENSABLE.

This completely revised and enlarged 1934 edition contains 108 solid pages of useful radio information, diagrams, illustrations, radio kinks and real live radio merchandise. It contains more valuable radio information—more real live "meat"—than many textbooks on the subject. As usual considerable space has been devoted to the beginner in radio. Chapter Two of the series of articles titled "Fundamental Principles of Radio for the Beginner," aside from being a fine grounding in the theory of radio for new fans, offers an excellent review to old timers.

If you have received copies of our previous editions, you are familiar with the type of book we publish—but this new edition WHAT A BOOK!

PARTIAL LIST OF CONTENTS

Chapter Two of "Fundamental Principles of Radio for the Beginner"—The New Tubes, Their Uses, and Their Fundamental Circuits—How to Make Money with Public Address Systems, How to Install and Maintain Them—How to Revamp Six-Volt Battery Sets to Use Two-Volt Tubes—Prize Winning Kinks and Short Cuts in Radio—How to Build the "R T" Beginner's Transmitter—How to Build the Famous Twinplex Short Wave Receiver—How to Construct an Amateur Radio Transmitter—A Most Modern and Complete Tube Chart Including Socket Connections for all Tubes—Numerous Free Offers, etc., etc.

WRITE TODAY — TOMORROW PRICES MAY ADVANCE. Enclose four cents for postage—Treatise sent by return mail.

RADIO TRADING COMPANY

104-B PARK PLACE NEW YORK, N. Y.

THE MAGAZINE
OF PROPHETIC FICTION

Vol. 5, No. 8 — March, 1934

TABLE OF CONTENTS

EDITORIAL *by Hugo Gernsback* 805
XANDULU *by Jack Williamson* 806
(In Three Parts—Part One)
WHAT IS YOUR SCIENCE KNOWLEDGE? 821
THE BRAIN-EATERS OF PLUTO *by Kenneth Sterling* 822
CHILDREN OF THE RAY *by J. Harvey Haggard* 826
MARTIAN MADNESS *by P. E. Cleator* 840
HILL SINKS INTO EARTH 849
CAVERNS OF HORROR *by Laurence Manning* 850
THE LITERARY CORKSCREW *by David H. Keller, M. D.* 866
THE EXILE OF THE SKIES *by Richard Vaughan* 874
(In Three Parts—Conclusion)
ROCKET SHOT SIX MILES 914
TO A SPACE-SHIP *poem by August W. Derleth* 914
LOST CONTINENT FOUND 916
FORTHCOMING STORIES 917
PASSING OF THE PLANETS—LUNA *poem by H. S. Zerrin* 918
SCIENCE QUESTIONS AND ANSWERS 919
THE READER SPEAKS—Letters From Readers 921

ON THE COVER this month we see Lieutenant Connor and Professor Bablon suspended from the space-ship above the Red Spot of Jupiter looking for the first time upon the weird land of the Tatrons and the Grach-people. (From "Children of the Ray" by J. Harvey Haggard.) Cover by Paul.

Published by Continental Publications, Inc. H. Gernsback, President; I. S. Manheimer, Secretary. Publication Office, Myrick Building, 29 Worthington Street, Springfield, Mass. Editorial and General Offices, 96-98 Park Place, New York, N. Y.

WONDER STORIES—Monthly—Entered as second-class matter at the post office at Springfield, Mass., under the Act of March 3, 1879. Title registered U. S. Patent Office. Copyright, 1934, by Continental Publications, Inc. Text and illustrations of this magazine are copyrighted and must not be reproduced without permission of the copyright owners. WONDER STORIES is published on the first of the preceding month, 12 numbers per year. Subscription price is $2.50 a year in United States and its possessions. In foreign countries, exclusive of Canada, $3.00 a year. Single copies, 25c. Address all contributions for publication to Editor, WONDER STORIES, 96-98 Park Place, New York. Publishers are not responsible for lost MSS. Contributions cannot be returned unless authors remit full postage.

WONDER STORIES is for sale at principal newsstands in the United States and Canada.

IF YOU WISH TO SUBSCRIBE to WONDER STORIES, make out all remittances to the Continental Publications, Inc. Be sure to mention the name of magazine you wish to subscribe for, as we are also agents for the following magazines: RADIO-CRAFT and EVERYDAY SCIENCE AND MECHANICS, subscription price of which is the same as WONDER STORIES. Subscriptions can be made in combination with the above publications at a reduced club rate. Ask for information. Subscriptions start with current issue.

WHEN YOUR SUBSCRIPTION EXPIRES, we enclose a renewal blank in the last number. No subscription continued unless renewal remittance is received.

CHANGE OF ADDRESS. Always give us old as well as new address and notify us as far in advance as possible.

Chicago Advertising Representative—L. F. McClure, 919 North Michigan Ave.
Western Advertising Representative—Loyd B. Chappell, 511 So. Alexandria St., Los Angeles, Calif.
New England Advertising Representative—Lawrence Mitchell, 80 Boylston St., Boston, Mass.

London Agent: Hachette & Cie., 8 La Belle Sauvage, Ludgate Hill, E. C. 4
Paris Agent: Hachette & Cie., 111 Rue Reaumur
Australian Agents: McGill's Agency, 179 Elizabeth St., Melbourne

There are many more new

Original MONEY-MAKING PLANS

In the March issue of EVERYDAY SCIENCE AND MECHANICS

Many specialized articles in this issue show you how to convert your spare time into prosperous ventures. They list cost of parts, suggest sale values, and give you hints for marketing the articles of your handicraft. With very limited capital, you can start in business for yourself and employ profitably hours otherwise idle.

In this big illustrated monthly there's plenty of construction articles for the home workshop

WE DO not hesitate to say that EVERYDAY SCIENCE AND MECHANICS is the finest *scientific-technical - mechanical - constructional* magazine in the field. Right up-to-the-minute with news flashes of scientific events from all parts of the world. Dozens of constructional articles for making useful things for the shop, garden and home. Many ideas from which you can make things to sell.

Get this magazine at your newsstand today and after reading your first issue, you'll agree with us that EVERYDAY SCIENCE AND MECHANICS is all that we claim it to be, and better.

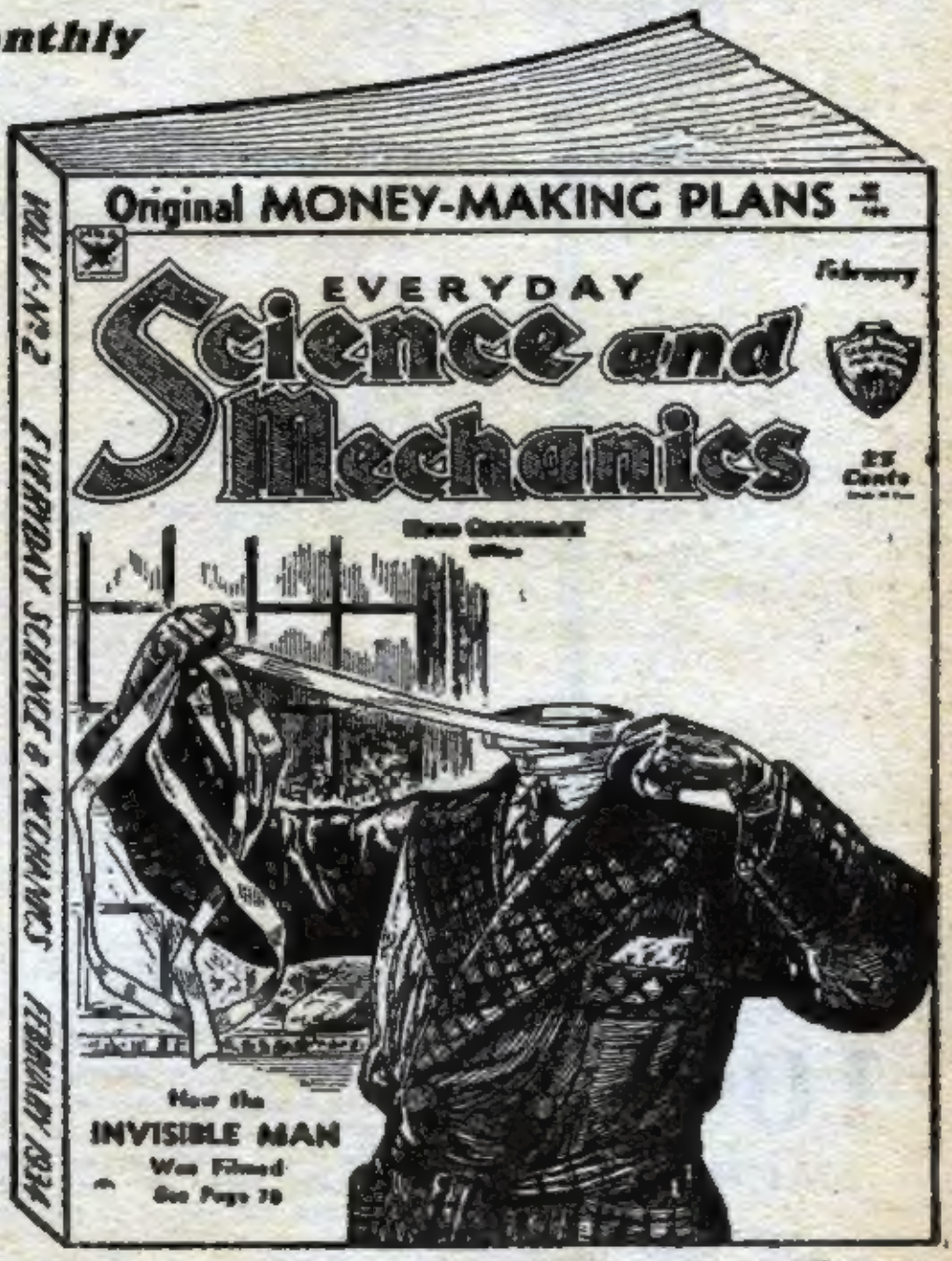
A host of interesting scientific subjects

Popular Magic
A New Series by the Great
"DUNNINGER"

X-RAYS FROM A RADIO TUBE
COMBINATION BREAKFAST CABINET AND DISAPPEARING TABLE
A CORNER WHAT-NOT
HOW TO MAKE A MICROSCOPE
BUILDING THE SIMPLEST TELESCOPE
MAKING A TINY GASOLINE DRIVEN AUTO

AVIATION	CHEMISTRY
WOODWORKING	ENGINEERING
ASTRONOMY	MICROSCOPY
PATENTS AND INVENTIONS	HOW TO RUN THE LATHE
BOOK REVIEWS	ELECTRICAL EXPERIMENTS
NEW DEVICES	HOUSEHOLD AND SHOP HINTS
CONSTRUCTION	
METAL WORKING	

AND OTHERS



Over 150 Illustrations, 4-Color Cover —9 x 12 Inches

Special! OFFER

$2.00

FOR ONE YEAR

MAIL THIS COUPON TODAY

EVERYDAY SCIENCE AND MECHANICS WS-334
100 Park Place, New York, N. Y.

I enclose herewith $2.00 for which you are to enter my subscription to EVERYDAY SCIENCE AND MECHANICS for one year.

Name .....

Address .....

City ..... State .....

(Foreign or Canadian subscriptions not accepted at this rate.)

STELLAR PUBLISHING CORPORATION
96-98 Park Place, New York, N. Y.
I am enclosing herewith my remittance of $..... for which you are to send me the numbers of books in the SCIENCE FICTION SERIES which I have circled below, at the price of 10c each or Six Books for Fifty cents. No less than three books are sold. Send remittance in check, stamps or money order. The numbers of the books that I want are circled below.

12 14 15 16 17 18

Name.....

Address.....

City.....

State.....

WS-3-34

6 New Titles HAVE BEEN ADDED TO THE SCIENCE FICTION SERIES

CLIP COUPON AND MAIL

10c EACH OR 6 FOR 50c

THE increasing demand by our readers for new titles to be added to the SCIENCE FICTION SERIES has now been met. Six new books have been published and are now ready. Many new authors have contributed excellent stories which you will enjoy reading. A short summary of the new titles will be found below.

These new books, as usual, are printed on a good grade of paper, and contain brand new stories never published before in any magazine.

Each book (size 6 x 8 inches) contains one or two stories by a well-known science fiction author.

The Titles Are:

12—MEN FROM THE METEOR
by Pauzie E. Black

In the unexplored heart of Australia lay the bizarre and cruel civilization of the meteormen. And into their midst came the two men from Outside, to pit their puny strength against the meteormen's power.

14—THE FLIGHT OF THE AEROFIX
by Maurice Renard

Renard is the H. G. Wells of France. With sly humor and yet grim reality he describes the most unusual and startling flight made by man. An entirely new type of transportation dawns upon the world in this masterly story!

15—THE INVADING ASTEROID
by Manly Wade Wellman

Into the vision of the Earth swam the huge but innocent asteroid. Mars, at death grips with the Earth, was far away; but the asteroid loomed ominous, menacing. Two men were delegated to solve the mystery; and what they found is revealed in this startling story.

16—IMMORTALS OF MERCURY
by Clark Ashton Smith

Under the sun-parched surface of Mercury, we follow in this story, the experiences of a man, reminiscent of Dante's Inferno. Every force of grotesque nature, the bitter enmity of the Immortals track him down in his wild escape to the surface.

17—THE SPECTRE BULLET
by Thomas Mack
and
THE AVENGING NOTE
by Alfred Sprissler

are two surprises for the lovers of scientific detective mysteries. Death strikes suddenly in these stories; clever scientific minds and cleverer detectives are pitted against each other in a duel with Death.

18—THE SHIP FROM NOWHERE
by Sidney Patzer

A trip to infinity is this unusual story; a mad chase across the infinite emptiness, tracked always by the avenging Marauder. Here is a story that deals with millions of years and billions of billions of miles.

STELLAR PUBLISHING CORPORATION
96-98 Park Place **New York, N. Y.**

VOLUME 5
No. 8

WONDER Stories

MARCH
1934

. . . . Prophetic Fiction is the Mother of Scientific Fact . . . .

HUGO GERNSBACK, *Editor-in-Chief*
CHARLES D. HORNIG, *Managing Editor* FRANK R. PAUL, *Art Editor*
C. P. MASON, *Associate Editor*

WONDERS OF RADIO WAVES

By HUGO GERNSBACK

WE have become so accustomed to modern wonders that we are apt to pay little attention to what actually goes on around us, and there is much we cannot perceive with our imperfect senses. We are all aware of the wonders of radio; but the thing that we know least about, and that is least publicized, is the instrumentality of radio itself, and by that I mean the radio waves. Traveling like sound waves, radio waves emanate from the transmitting aerial in all directions. In order to get a good mental picture of what is happening, I can think of nothing better than imagining a series of soap bubbles, one blown around the other—the last one inside, the first one enclosing all the others—until we have an enormous soap bubble, many miles high, its center always being the radio mast or aerial of the transmitter. As the radio waves leave the transmitting aerial, they are projected out into space, and now become free waves. In their course over the earth's surface, they encounter endless adventures. They will, for instance, go through solid wooden or stone buildings, as if the obstacles were not there. In this respect, the radio waves are similar to sound waves. But radio waves are stopped by solid or fairly solid steel or iron obstacles, such as, for instance, a modern skyscraper, although the waves still penetrate the spaces not enclosed by steel or iron.

We have little actual information concerning what happens between the transmitting and the receiving aerial. We deliberately talk of "propagation" of the radio wave, but there is little actual knowledge and experimental evidence of what is going on. We may transmit from a free balloon, or from an airplane or airship, without having recourse to the usual "ground wave," which is set up in the earth by the ordinary transmitter. Of course, with a transmitter installed in an airplane, for instance, there is no "ground," yet we manage to get along very nicely with only one connection, *i.e.*, the aerial, the ground being missing. Of course, in an airship or airplane, we have a so-called "phantom" ground, which is usually the metallic frame of the machine.

From the future space-flyer, it is pretty well understood today, we will have no trouble in signaling back to earth; or from earth to the space-ships, by means of short-wave radio. The reason, why we must select short waves for this purpose, is in the so-called Heaviside, Kennelly and Appleton layers.

On earth, radio waves are reflected by these ionized layers, which are many miles above the surface of the earth. The Heaviside layer, in the first division of our rarefied upper atmosphere, is thought to be a highly electrified layer of gas where all particles are *ionized*, or charged positively, and thus made conductive to the electric current. The upper strata of our atmosphere, therefore, act similarly to a polished mirror and reflect the waves in all directions as any concave mirror would do. This accounts for the passage of radio waves around the world, without their going off into space. This, of course, holds good only for the long waves; on the so-called ultra-short waves of two meters and less, the Heaviside layer no longer is sufficiently reflective; and, if you attempt to send a short wave radio signal beyond the horizon, for, let us say, 400 or 500 miles, you do not succeed, because the atmosphere no longer stops these short waves. Quite to the contrary, they go right through the layers, as if these did not exist, and the waves pass out into space, never to return. Here they become "eternal." They are hurled out into space at the rate of 186,000 miles a second, and the energy of the waves never returns to earth. If, on some super-planet, many light-years distant, a scientist were listening in, there is no question but that he might—provided that his receiving instruments were sufficiently sensitive—hear the message sent out by us just as many years before. In this respect, he would be listening in to us in the past, just as our astronomers today are receiving the light of distant stars which have, in many cases, taken millions of years to reach us. The star, in the meanwhile, may have ceased to exist. The same might be the case of the imaginary scientist who would receive earthly intelligence, after our entire race had vanished.

(Illustration by Paul)

A strange picture it was—the violet bubble mounting upward, the girl looking down from within it with an agonized, beseeching face.

XANDULU

By JACK WILLIAMSON

● This story is written in the style characteristic of only Jack Williamson. For over five years, he has been one of the readers' favorites because of the originality of his plots, ideas, and theories, combined with beautiful and colorful composition.

You will find this novel well up to his standard. Herein we meet inexplicable forces of an alien intelligence incomparably ahead of ours. We are taken to a strange part of the world where ancient creatures plan terrible things with powerful sciences.

BOOK ONE

The Girl from Xandulu

● At dusk, we had slipped past Gibraltar, looming grimly massive upon the left. Just before midnight the moon had risen; across a Mediterranean that was a milky plain beneath it, the *Gay Moth III* plowed sedately toward Malaga, the rushing spray from her bows coruscating like pale jewels.

Unable to sleep, as I often am, I had called Carlos, my Filipino boy, to help me to the deck at moonrise. For two hours I had been sitting, swathed in rugs, beside the foredeck rail, watching the white rushing magic of the cleft sea, and a few slim porpoises that leapt and raced ahead.

Under the moon, the big yacht was silent save for the slow beat of her engines and the incessant rush of water. The ghostly desert of the sea was blankly void; the only human being in view was McLendon, my skipper, a white, trim figure in the wheelhouse high behind me, standing a solitary watch as he likes to do sometimes in fair weather.

For a time, lost in the quiet, supernal wonder of the moonlit sea, I had been almost happy, forgetful of the frailties of a sick body, that have made the yacht for many years my prison. The essence of peace rested upon sea and ship; and in the thing that presently happened was an element of incongruity, of wild, insane rebellion against the spirit of that tranquil world, that was to me almost a physical shock.

Above the dull vibration of the engines and the ceaseless hiss of white water, my ears detected some vague alien note. Moments passed before I could identify it as the whine of a hard-driven airplane motor. Faintly curious, I scanned the moon-washed heavens, and presently discovered the plane, a high fleck of silver, rising up out of the south from the direction of Africa.

Idly I watched the plane, wondering dimly what mission might be bringing it across the sea from Africa at such an hour. Still I had no slightest premonition of the incredible adventure that was riding with it into my life, of the alien peril, awakened from a land lost and forgotten, that was at last to spread the dark wings of its unthinkable menace over unsuspecting nations.

My interest quickened when I saw that the racing plane was making very curious maneuvers. For a time it would fly straight northward, then abruptly it would dive, fling upward, zigzag, or roll. Unmistakably the pilot was attempting to shake off some pursuer, though I could see nothing in the sky behind it.

"Dr. Brander!" Captain McLendon called suddenly from the bridge. He was pointing excitedly in the direction of the plane. "A funny thing. See it? Try your glasses."

He turned to call some order into his speaking tube, then raised his own binoculars again. I reached for the powerful

glasses beside my chair, focussed them. Quickly my wondering, half-terrified attention was fixed upon the plane—and the things that followed it.

Unexpectedly distinct in the lenses, I saw the machine to be a two-place military biplane. As it banked and slipped down across my field of vision, I saw the machine gun mounted over the forward cockpit spurt yellow flame. The plane was fighting!

Then I saw the things it fought.

Bubbles, they looked to me. Glistening, iridescent violet spheres; seven of them I counted, driving after the plane, moving with a velocity that was astounding.

Weird things, and amazing, were those bright globes. Not more than a yard in diameter, they moved in a manner that gave proof of their intelligent direction. Nothing about them was familiar; they were utterly strange and in some way infinitely terrible.

I had expected to see a second, hostile airplane. Sight of those seven pursuing globes smote me with that instinctive fear that always rises from encounter with the completely inexplicable. To my wondering, bewildered mind, they brought first hint of the brooding and sinister power, of the incredible, immemorial science of the hidden world of Xandulu.

The fugitive plane had turned back upon them. As I watched, it drove directly at the seven bright spheres, yellow flame spitting from the gun. The advance of the violet globes ceased before its attack; they parted in two groups to let it pass.

But they were not unscathed. One of them exploded incontinently into a flare of purple light. Another, and yet a third, flashed into blinding destruction.

At that I felt quick relief, for in the bright strangeness of the globes I had read menace, unknown, inconceivable, to the unsuspecting world of man. But that relief vanished, and cold fear sank its talons in my throat, when I saw the spheres strike back at the plane.

Thin green lightnings stabbed from violet globes, bright darts hurled at the fabric of the fleeting plane. The machine flung suddenly upward, fled from them, driving swiftly toward us again. The four remaining bubbles of radiance swept swiftly after it.

"What ye make of it, Doctor?" McLendon asked at my elbow.

I saw that he had called the whole watch to the deck, relinquished the wheel to another member of the crew. His long, rugged face was tense; his voice was edged with the same unreasoning fear that I had felt.

"I don't understand it at all," I told him. "Little balloons of light, following the plane, striking at it with green fire. It's—uncanny!"

"Aye, I never seen the like."

"The things, Captain, are somehow—hellish! They have an inhuman—power! I don't know what—"

"Aye," muttered McLendon. "I don't like 'em."

● Once more the plane swerved back, and again I raised the binoculars.

For five minutes I watched a weirdly amazing battle. Ceasing his attempts at flight, the unknown pilot fought the spheres with a half-cautious, half-reckless daring and a high skill that assured me he was no tyro aviator.

The fourth globe, caught squarely before the vicious gun, vanished in a blaze of purple light. For a time, then, the contest went on without casualty, the plane flinging madly about, its gun spurting occasional bursts of flame, the bright bubbles darting after it, flashing at it their bolts of green flame.

I knew that I was witnessing a superb exhibition of sheer airmanship. Such flying is an art, and like any art, it expresses the personality of the performer. From admiration of the high courage and the instinctive skill of the pilot, I came to have a vague feeling that I knew him, that I had met before a man who flew like this.

But the vague wisp of recollection was snatched from my mind when the fifth sphere and the sixth hit simultaneously,

bursting into a single, enormous flood of purple light, casting momentary grotesque illumination upon the quiet sea and the yacht.

The single remaining violet bubble was not to be disposed of so readily. Clinging close above the fuselage, it was raining its virescent bolts upon the plane. The pilot appeared unable to dislodge it from this position, where he could not bring his gun upon it.

At last the plane slipped into a hurtling power dive for the sea. I felt abrupt apprehension that the green lightnings had slain the pilot, that the mad fall was to end in the sea. But finally, with a suddenness that must have put a terrific strain upon its fabric, the ship flung up and back, landing gear skyward, gun erupting flame.

The last of the incredible pursuers expanded into a vast, blinding sheet of purple light. An instant the plane was a black shadow against it. And then it was gone. The astounding battle was ended, with the aviator victorious.

In that instant, the puzzling fragments of memory slipped into place. That last maneuver had recalled it all; this superb flying was the flying of Miles Kendon. It was as characteristic of him as his handwriting or his walk.

Miles Kendon!

Almost my oldest friend and my closest one, although I had hardly seen him since my illness forced me to give up the life of careless adventure the two of us once had led together.

Miles Kendon! A picture of him came to my mind. A straight young giant, broad of shoulder and narrow of hip, a reckless smile upon his hard face, his greenish eyes agleam with a dare-devil light, his stiff hair pushed back in a bronze tangle, revealing the livid, ragged scar across his forehead and right temple—the mark of a frenzied Malay's kris. Just thirty years old, Miles now would be.

"I know that pilot," I whispered to McLendon, who was still beside my chair. "Only one man would have managed that ship exactly as he did."

"Eh?" he muttered, his mind still upon the distant plane.

"Miles Kendon. Known him since we were boys. Went to Leland Stanford with him, and he and I were over most of the world together in the *Moth II*, before my illness. Our families were intimate.

"Miles inherited a couple of millions two or three years ago when his father died. But I don't think he has been back to California since, or taken any interest in the estate, except to cable for funds when he needs a new airplane.

"He has always had a genius for three things: cracking up planes, getting into trouble, and fighting his way out against all the odds in the world. But he must have stirred up something unusual this time. Those shining bubbles—"

I could not forget the terror that had laid cold fingers upon my heart as I watched that fantastic battle. But yet I was far, far indeed, from any true conception of the meaning of what I had seen. The hoary antiquity of Xandulu; the mysterious, incredible power of her alien science; her colossal, unnamable threat to our familiar world—they were all unguessed.

● I heard, then, the little harsh sound of pain in McLendon's throat, and realized he had not been listening. And I saw what he had seen. The victory over the bright globes had not been won without cost. An angry red banner was rippling back from the fuselage of the plane.

Trailed by a dark plume of smoke, the machine dived suddenly for the sea.

"Those green flashes," McLendon muttered. "He's on fire!" Then, abruptly, "Ye say ye know him?"

"Yes!" I cried. "We *must* help him! It's Miles Kendon, an old friend of mine. I'm sure of it!"

"Aye, we'll stand by to do what we can."

He left me, and climbed back to the wheelhouse.

The big yacht was coming around, and the crew already preparing to lower away the gas launch, when the flaming plane struck the sea. A smother of spray rose

about it and subsided, and then the flame rose straight into the night, a crimson, motionless blade.

"Hurry!" I implored McLendon. "For God's sake, hurry!"

The captain was already doing his utmost. Four men had taken their places in the launch with Harris, my second officer. The falls creaked as it was lowered away.

"One chance, Doctor," McLendon told me, passing by my deck chair after his part was done. "If he was able to dive and swim away. A chance . . . . aye, if the burning gasoline doesn't spread too fast!"

As the powerful launch leapt away, engine roaring, I wished that I were aboard. But my body is a feeble, useless thing. I never had Miles's splendid physique; the hardships of our adventurings ever told more seriously upon me than upon his iron body. My life, upon several occasions, I owed to his robust strength and loyal patience. We were together when I contracted this obscure tropical malady which, the specialists tell me, my weakened constitution will never be able to throw off completely. I do not leave the *Gay Moth* once a year.

I could only sit helpless by the rail and watch, and hope.

Miles Kendon! With what conflict of emotion did I watch!—hoping to see the grim dare-deviltry of his smile again—fearing that he had died or been seriously hurt in the flaming wreck—wondering if my certainty that the magnificent airmanship I had witnessed was Miles Kendon's was indeed well founded.

My dearest friend. A dare-devil with a streak of cold, fearless caution. Sober in manner with a flashing blade of rare humor always in reserve. An enthusiast, Miles Kendon, a dreamer—with a dash of sane common sense.

With the binoculars, I watched the launch slacken speed, circle the still flame that was a pillar of red upon the sea. A swift black shape, the vessel cut dark waters that glinted yellow and scarlet.

Then I breathed deep with relief. The launch had stopped. Her crew were dragging two dark figures over her gunwale. At the distance, it was impossible to see if either of them were actually Miles. But my certainty that he had been the pilot was unshaken; I recall a faint surprised jealousy that Miles, the lone wolf, had found another to take my place.

In a few minutes more, they were back alongside. Upon a sea that was a sheet of metal, the swinging falls were easily made fast again, the launch hoisted with her passengers aboard. I uttered an involuntary cry of joy and struggled up out of my chair, for the tall man who clambered out of the boat, sodden garments clinging tight to his broad-shouldered form, was indeed Miles Kendon!

CHAPTER II

The Girl Who Rode on Eagle

● "Miles!" I called, and ran uncertainly toward him, my Filipino boy, Carlos, hovering close behind in case I needed assistance.

He studied me in the moonlight as I seized his moist hand, and cried suddenly:

"Brandy! It's old Brandy! How are you?"

There was real concern in his query; it was no meaningless formula. And I answered him.

"About the same, Miles. Always will be, I guess. But I've the *Moth* and the freedom of the seas. Could be worse."

His wet hand closed upon mine, and he paused before he spoke again.

"Some luck you happened along, Brandy. Saved us a long swim to Spain."

And he turned to assist his shivering companion.

"We're all okay, Sue!" he cried, encouragingly. "Not one thing left to worry about. Forget the faces, now." And he added a murmuring word that I did not understand.

I saw then that his fellow passenger in the doomed airplane had been a girl: He helped her to the deck. Her dripping, shapeless clothing adhered to her body,

so I saw even in the moonlight that she was youthfully graceful.

Her long, streaming hair looked quite dark. Her face, I could see, was very white, her dark eyes wide and bewildered. Her teeth were chattering, and she looked up and down the deck in mute wonder.

With a little nervous, fluttering movement, she clutched Miles's arm and spoke to him. Her voice was deeply and richly musical. The words were liquid, the vowels prolonged, the consonants softened and trilled. It was no language that I knew.

Intently Miles listened, as if he had some difficulty in understanding.

"What is it?" he then asked in English.

She repeated her sonorous phrases.

"That's all right, Sue," again he replied in English. "These are friends of mine. And don't worry about the faces. We'll bamboozle them yet!" And he introduced us. "Su-Ildra, Dr. Roscoe Brander."

"Doctair Rusco Br-r-rander," she approximated the sound.

Both of them being not only exceedingly wet but shivering with cold, I sent them below at once, in charge of Carlos and the steward. There were vacant staterooms. My own clothing being hopelessly small, I borrowed a suit from tall McLendon for Miles, and to the girl I sent a pair of my own pajamas.

Half an hour later, Miles came back upon the deck, warm after a hot bath, his great shoulders almost bursting the coat of his borrowed suit, though the pants fitted well enough. The pearly hint of dawn was just appearing in the east; the air was bracingly cool.

"The young lady—" I questioned.

"Su-Ildra is asleep," he said. "It's been an exhausting time for her, poor girl."

He came to stand in front of my deck chair. With quick, nervous motions that revealed his own great fatigue, he lighted a cigarette that he must have obtained since coming aboard. Its cherry tip waxed and waned against his tense face. In the cold light he seemed pale, worried, very tired.

"Excuse my not rising," I offered. "I find any excitement very tiring."

"Certainly," he said. "I'm sorry, Brandy."

"I'm interested in your companion, Miles. Where did you find her?"

"Didn't exactly find her, Brandy. She found me. She's a flier, too, in her own way. When I first saw her she was riding on an eagle." He chuckled at my astonishment. "Or a huge bird, anyhow, that looked to me like an eagle."

"Tell me about it, Miles, and those shining globes."

He shook his head wearily. "Please let me off a while, Brandy. Dead on my feet. If you knew—"

"That's all right," I said. "Sit down." I pointed to another chair.

"It's a long story, and a queer one, Brandy. Couldn't do justice to it now. Go to sleep in the middle of it." I saw that he was swaying a little on his feet, from sheer fatigue; but he disregarded my invitation to seat himself. He asked suddenly, "Where are you bound, Brandy?"

"Malaga. At least, that is what I told Captain McLendon. It makes no difference."

His strained face was very anxious.

"Could you take us to Marseilles, then?" he asked earnestly. "As fast as possible! I told Su-Ildra not to worry. But there is yet danger. You see, Brandy, I'm afraid—well, we're *hunted!*"

"Hunted?"

His intent eyes searched my face—wide blue eyes, greenish, flecked with steel-blue glints. Always they had seemed invincible, resolute. Now, for the first time, I read worry in them, doubt, apprehension.

"You saw the fight? The globes?"

"We saw, but not to understand. The globes—what were they?"

"I don't know, Brandy—not altogether. They're things. Instrumentalities. I might call them, for they aren't alive. They were sent after Su-Ildra.

"Tomorrow—or rather today—I'll tell you the whole story, Brandy. It's a big thing that I've run across—amazing—ten

times older than Egypt. And there's a lot ahead of us, I think, in some ways. There's terror in it, Brandy—danger!

"Just how much danger, or exactly what it is, I don't know. A lot Su-Ildra hasn't been able to tell me, yet. But as I understand it, Brandy, those globes and the force behind them are about the most deadly things that have ever been turned loose.

"—But we can steam north? Fast?"

"Yes. No trouble about that. I'll tell the officer at once."

"Have me called by three this afternoon. I may be rather a hog for sleep. Strain, lately. All safe enough until tonight. Sun somehow interferes with the globes. S'long, Brandy."

He took my hand a moment. The familiar, unconquerable grin flickered across his weary face, a grin maliciously twisted by the livid scar of the Malay's blade across his temple. And then he walked away from me, reeling a little with fatigue.

● At three I sent Carlos to Miles's room.

He was still sleeping soundly, and I had not the heart to have him disturbed. A few minutes later I heard a low, deep-toned cry of wonder behind me, and saw that the strange girl had come on deck.

In my white pajamas, she looked a little odd, and despite them, it was easy to see that she was beautiful. Her long hair she had combed and wound about her head to make a bright coronal. Dry, it was dark no longer, but copper-hued, and glinting with rich splendor under the low Mediterranean sun. Her eyes, which had seemed black, were darkly, pensively blue. Her face was very fair, firm, and serious and lovely.

She stood a moment watching the sapphire brilliance of the sea, as if in entranced wonder, and then came tripping to my chair upon white and lovely bare feet—no one, apparently, had thought to provide shoes for her, and she had been picked up with none of her own.

"Good evening, Miss Ildra," I greeted her.

She said something then, in her strange language. The melody of her voice was pure delight but, of course, I did not understand. I shook my head. She laughed a little.

"My tongue you not talk. Where Miles is?" she asked awkwardly.

"Miles is asleep."

"Sleep? Ah, sleep! Miles need sleep. Much tired."

"Are you hungry?"

She understood that at once, nodded eagerly, her eyes bright. I rang for Carlos, and had a little table brought out beneath the deck awning, and a simple meal set upon it. Then Miles came striding across the deck, evidently much refreshed by his sleep, the old, infectious recklessness in his greenish eyes.

With a little eager cry, Su-Ildra ran to meet him. I thought she was about to embrace him, but she merely took his hand, child-like, and came smiling with him to where I sat.

He murmured something to her in her own musical language, and she answered melodiously.

"Afternoon, Brandy," he said to me. "Guess you are all ears for the yarn. Sorry I had to make you wait, but I was half-dead. You'll understand, when you hear."

I nodded sympathetically.

He looked anxiously about at the azure bowl of the sky, squinted calculatingly at the sun.

"Marseilles?" he asked.

"At full speed."

"Thanks, Brandy." Feelingly. "It's a deadly peril. You'll understand. Safe enough, anyhow, till dark."

When we were seated around the little table, with the attentive Carlos to serve us, he began his astounding tale. It went slowly at first, for Miles was eating with a most excellent appetite. But presently he finished the meal and leaned back in his chair with his big hands locked at the back of his neck, his greenish eyes roving between Su-Ildra and me and the lowering sun, as he talked.

CHAPTER III

The Well

"It doesn't matter how I came to be flying for the Berbers, in the first place," Miles began. "But I've always admired their spirit of independence and I didn't think the foreigners were giving them a square deal. Anyhow, I had to fight for somebody. Thought it might as well be them as anybody.

"I've been in Morocco a couple of years. Interesting country. But I won't bother to tell about our little war.

"About two weeks ago, my military duties took me over the High Atlas. *Idráen Dráen,* the Berbers call them—'Mountains of Mountains.' They are pretty rugged, you know, and rather less than half-explored.

"It was south of the plain of Marrakesh, beyond the highest range and the peak named Tinzar, between the barrier range, you know, and the Sahara. Rough a country as you could want—and as desolate. The desert, you might say, breaks like a wave on the mountain wall. The hills keep out the rain, so there isn't much forest, but the country is all chopped up with gorges and canyons. A man couldn't cross it in a year except by air—not even if he could find water and if the hill tribes didn't get him.

"You understand I didn't *have* to go that way, Brandy." And Miles grinned his familiar, dear old grin, twisted maliciously by the scar of the kris, his greenish eyes twinkling. I smiled in understanding; Miles could be counted upon to take the most adventurous way.

"You see, a certain Berber *Amin,* a man I had a good deal of confidence in, had told me a story of a gigantic city of *ifrits* in that forsaken land, upon a mountain no man could reach. The *Amin* claimed that he had seen it from a peak in the edge of the desert region, a forest of gigantic green minarets. A man of modern ideas, was the *Amin;* he realized the possibilities of exploration by air.

"Anyhow—and considerably to my surprise—I found the city in the heart of the roughest country I ever flew over. Not so high as the barrier range, but a sort of cosmic dump-heap. Sand-mountains, old lava beds, colossal boulder fields, cragged peaks, all slashed through with dry canyons—the edge of the Sahara, scrambled and tossed up into the sky.

"The city stands on a flat-topped mountain. The sides of it are so abrupt that a man couldn't climb it even if he could get to the foot. But the top is a level mesa—or would be level but for the mountains on it that are the ruins of the old city, about four miles by six.

"I can't give you any idea of that shattered city, Brandy. I can't imagine, myself, what it looked like when it was lived in. But the most of New York is a mud village compared to what that city once was. It was that big.

"The whole plateau is covered with broken towers, pylons—I don't know what to call them. Some of them must yet be five or six hundred feet high. They are just stumps of the buildings that once were there. That's the word—stumps!

"They are spaced wide apart, at least a thousand feet. The ground all between them is scattered with the fallen material; great square green boulders—the city is all of green. That gives you an idea of the city, Brandy—a field covered with colossal, square green stumps.

"I landed, of course. Anybody would quit a war for such a discovery as that. It wasn't easy to find a landing place. The plateau is covered with those fallen rocks so thick you have to climb across it, rather than walk. But I found a clearer place that must have been a park. Even that was scattered with the stones, so I came near cracking up. I had to pancake, and I saw right away that I had several weeks' work to clear a runway to take off again.

"I wasn't worried about having to stay. I'd brought a pretty good stock of rations in the plane, knowing the country, and there was water in a little lake in the park—an artificial reservoir, I think.

"I couldn't explore the ruins, Brandy. They were too big for that. All I could

do was climb about, over mountains of broken green blocks, wondering like a kid in a museum. Every acre had enough on it to keep an expedition busy a year. Why, just a fragment of that green stone, whatever it is, would put the science department of dear old Stanford into a panic.

"For the green stuff isn't any ordinary rock, Brandy. It's dark green, translucent. Looks something like porcelain. But it's nearly as tough as steel, and it wasn't crumbling; it didn't show any sign of weathering.

"The whole plateau is covered with fallen blocks of it, but they didn't fall because they were decaying. Earthquakes shook them down, perhaps. Or it might have been the ice piled on them, because I think, Brandy—I'm sure—that city is older than the last Ice Age!

"I know they told us at the university that the cave man was the *élite* of civilization, then. But I got into rooms, great halls, in those stumps of buildings, and everything but the green stone is gone. Dust, Brandy. Dust! Feet of it! Not even a trace of metal.

"That city was lying there, lost in the desert hills, when Egypt was born, cradling its dead secrets. It may be older than Mankind, Brandy. I found nothing to show what its builders were—no utensils, no sculpture. But they had science, Brandy. We couldn't build a city like that. We have nothing like the green stone.

"But the city was only the beginning!

● "Three days I had been there, when I found the Well.

"I had been climbing across the heaps of broken stone toward the center of the city, among shattered green piles as big as the Great Pyramid. And then I came to a curving wall.

"The wall is of the same dark green, perdurable substance. It seemed to have been cast—formed—all in one piece; I couldn't find a seam in it. It hasn't even begun to crumble.

"The wall is curved. It encloses a circular space about a thousand feet across, in the center of the city. In some places it is two hundred feet high; in others, the heaps of stone reach almost to the edge.

"At once I was filled with a singularly intense desire to know what was inside of the wall. I went all around it, but nowhere did the *débris* reach quite to the top. Selecting the best place, I began to build a stair of the smaller loose green blocks.

"In three hours I had a platform high enough so that I could stand on it and reach the top of the wall. I hooked my fingers over it and scrambled up. The top of the wall was flat, like a curving green road, and about forty feet wide.

"I walked across it and looked down into—the Well!

"Down, down, down! The pit inside of that green wall reaches down into the heart of the earth, Brandy. It made me dizzy to look into it, much as I've flown. I had to lie down on my face to look over the edge.

"The Well is about a thousand feet across. It's lined with that dark green stone. How deep is it? I don't know. A little below the top it was dark. The green walls became almost black. And down they fell, sheer, smoothly curved, unmarred by any visible seam. Down, down, down. You can't imagine it, Brandy!

"At the bottom of the Well was a little disk of gray light. I thought at first that it must be the reflection of the sky in water. It looked very tiny, yet I knew it must be a thousand feet across. It must be ten miles below.

"Can you picture that, Brandy? Ten miles, when all we know of the earth's interior is based upon a very imperfect exploration of the first two miles of its crust! And I know now that the space below the Well extends far deeper; the shaft is merely a doorway.

"I soon learned that the disk of silver in the bottom was not water. It didn't fade when night came. There was light below!

"I stayed there on the wall a long time, Brandy, wondering. I already had known that the builders of the city had possessed

a strange science. Our world, I tell you, Brandy, could build nothing like it!

"It was three days later that Su-Ildra came.

"I was still clambering about the central section of the ruins, no more than skimming the volumes of its wonders. The mystery of the Well fascinated me—the disk of luminous silver in the bottom of it. Two or three times a day I climbed the wall and looked down into it.

"Why had the Well been dug? What was below? What made the light? Could the Well explain the desertion of the city, the vanishing of its builders from the earth? Though I hadn't even begun to clear off a field for the plane, I was wondering if I could fly down into the Well.

"Every night, of course, I had to go back to my plane and the lake. One morning I was climbing back to the Well when I saw a bird rise above the green wall. A bigger bird, Brandy, than I had ever seen before—a lot bigger than a condor. It has come to me since that the air would be denser in the world below the Well, better adapted to the development of large birds.

"It looked like an eagle. Its feathers were a glistening, red-brown, almost scarlet beneath. It flew with slow, labored wing-beats, as if nearly dead with exhaustion. Over the wall it collapsed, and came struggling down on the rocks outside.

"It was falling when I first glimpsed the girl on its back.

"I knew, of course, that it had come up out of the Well. And I was hardly as much surprised as might have been expected. I had already imagined—perhaps upon a rather flimsy foundation—that there might be a hidden world beneath the Well, to which the vanished builders of the city had gone, for some unknown reason.

"The eagle was already dead when I reached it. The girl was picking herself up beside it on the tumbled heap of green blocks where it had fallen. You can look at Su-Ildra, so I needn't try to describe her."

With a tender gleam in his greenish eyes, Miles smiled across the table at the girl. She was listening to him intently, wonderment and understanding alternating in her darkly blue eyes. The bright helmet of her hair broke the late sun into coppery gleams; her skin was the white of alabaster.

"She wasn't afraid of me. She called out to me in her strange language. Wanted me, I gathered, to help with the eagle. At first she couldn't believe it was dead. We gathered it up from its sprawling position on the rocks.

"Truly it had been a magnificent bird. Its weight was between two and three hundred pounds, and the extreme reach of its wings must have been thirty feet. Beak and claws were in proportion; it must have been a savage fighter.

"Sue was heartbroken when she finally realized that it was dead. But it turned out that she had too many troubles to take much time to worry about the bird. She was frightened, Brandy—afraid of something in the Well—something that was hunting her!

CHAPTER IV

The World Beneath

● "Now, Brandy, you know how I used to stand on the lady question. Excess baggage, and all that! But somehow I liked Su-Ildra from that first day. And when I found that she was in trouble, I decided to look after her and let the Berbers fight their own battles. My other agreement had really expired months before, anyhow.

"Our conversation, of course, was a bit slow and awkward at first, but Sue seems exceptionally intelligent. Intuition! She could always guess what I was driving at—and she's one grand little actress. When she couldn't tell me anything, she'd act it out. Pretty soon we were picking up quite a few of each other's words.

"I took her back with me to the plane, all in, poor kid. I had to carry her part of the way. She was thirsty and starving. Allah knows how long she and the eagle

had been flying up out of the Well. I fixed her up, and then went back and dressed out the best of the dead bird to eke out my diminishing supplies.

"I soon made the girl understand that the plane was a flying machine. She didn't seem to have a very high opinion of it; thought it was rather crude and clumsy, or so I gathered. And when I demonstrated the machine gun, she seemed to think it a rather uncertain defense against her enemies in the Well.

"She was in a desperate hurry to get away from the vicinity of the Well. The next day I began clearing off the runway. Sue helped, as soon as she got over the hardships of her flight on the eagle.

"Those blocks of green stone were heavy. It took us three weeks to get them cleared off a space long enough to take off from. We talked all the time and got to understand each other pretty well. A bright girl, Sue, and plucky as they make 'em.

"She managed to tell me a little about herself and the place she came from—though there is still plenty that I don't know. She and her people live down at the bottom of the Well. There is a considerable space there—a sort of cavern world, I suppose, I don't know how large. She calls it Xandulu.

"It seems that three races live there. Two of them are not human. At least, not completely human. I don't understand just what they are. The third is composed of Sue's people. She calls them the *Ara*.

"One of the other races she calls the *Lelura*, the Flame Folk. She says they are the oldest race. Once they lived above, in that green city. They opened the Well into the subterranean world. She seems to admire them a lot, or rather to revere them. Apparently she looks on them almost as gods, remote and unconcerned!

"It's the other race, the *Ryka*, that is making the trouble. It's not clear just how near human they are. They're gigantic beings, I gather, with red skins and yellow eyes and black teeth. The females are the fighters, and larger than the males, fierce and blood-thirsty.

"This race, Sue tells me, is ruled by a being—a god, maybe, or a monster that is called the Red One, or *Quithu*. While the females are the warriors, the males are the special servants of this *Quithu*. The leader of these males—a high priest, I suppose you would call him, if the Red One is actually a god—is an unpleasant old fellow named Bak-Toreg, Sue's special enemy.

"Now, led by the Red One, Bak-Toreg, and Hoja-Ze, their red empress, these beings have just broken an old truce to make war on Sue's people. Pretty well exterminated them in the first attack.

"Sue, and a few others, got away. She was commanded by the Flame Folk, the *Lelura*, to come up through the Well. Just what they are, or how they were interested, I don't understand. But it seems that the *Ryka* are planning more devilment, and she was sent out to warn the world. Just what we're warned against, or what we're supposed to do about it, isn't clear. I'm not sure she knows herself, except that we are to 'beware of the Red One.'

"The first globe came the night before last. We had been camping in a little hollow in the piles of green stone near the plane where we were sheltered from the wind. The nights were cold there on the mountain—desert air, you know, and the altitude. We kept a little brush fire.

"The fire had burned to embers; I was getting cold and just about waked up enough to build it up again, when I was roused by a queer sound, a sort of whining monotone, so shrill that it was almost a shriek. A steady vibration. It was somehow mechanical, like the keen, unchanging hum of some high-speed machine.

"A moment later I heard Su-Ildra scream. Across the bank of red coals I saw her starting to her feet, arms thrown up as if to shield her from something. And then I saw the thing that had roused me.

"A glistening bubble of violet light, it was, three feet thick. It was not opaque, not a solid object. I could see a bright star through it. I sensed about it vibrant,

unstable forces—balanced energies, held in delicate equilibrium. The sound of it was somehow like that of the singing flame we rigged up in the university lab, though louder and shriller.

"I was on my feet, dragging my automatic from the spring holster under my arm, when I saw the face in it.

● "Guess you saw the spheres after the plane last night. But you couldn't have seen the faces. That face was no more substantial than the bubble itself. It looked like a mere reflection in the heart of the bubble, and yet I knew that it could see me.

"The thing was hideous, Brandy—diabolical. You can hardly imagine the terror of it all: a disembodied face floating in the bubble—a hellish face, the concentration of all evil! It made my flesh crawl.

"The skin of it was a sort of sickly orange-yellow; dead, wrinkled parchment. The nose was a thin beak. The leathery yellow lips were drawn back in a perpetual sneering grin, and the teeth were black. The face was centuries old, with the print of obscene evil all over it. But the most horrible thing about it was its *non-humanity*. The stamp upon it was of alien, hostile blood.

"The eyes were strange, sunk far back beneath coarse black eyebrows, above the withered yellow cheeks. They were yellow, golden, bland. They twinkled, Brandy. They seemed gentle, mildly curious. But they only accented the horror and the evil and the ancient, timeless power of the face.

"You know I've done a bit of scrapping, Brandy. But when I saw that face in the violet globe, just floating there, fading out around the edges as if out of the focus of some superoptical instrument of projection—then I knew all the rest had been just a friendly preliminary.

"There was nothing weak about that face. It was all evil—cunning, obscene, cruel, hateful! There was nothing in it of stupidity or indecision, or compromising kindness.

"The sphere moved toward me a little as I got up. And I saw in that face what it meant to do for me. I didn't waste any time on the draw. I shot right between the eyes of that yellow face, even if I knew it was no more than a reflection, an optical image.

"And the bubble exploded in violet light. You've seen what happens. The humming ended in a sharp report, and both of us were knocked flat. Electricity, I guess.

"That was one way to destroy the globes. I've thought about them a lot. I think they are just condensations of energy, vortexes of balanced forces. The bullet upsets the equilibrium, lets the force escape in light and electricity.

"They must be controlled, of course, from Xandulu, by the man the face belongs to—Sue says he is Bak-Toreg, the priest of the Red One. It's something, I suppose, analogous to our radio remote control. But those spheres are beyond anything we have. They must be simply constructions of fluid energy, maintained and directed by a beam wave. But the man at the other end can see through them, carry objects with them, use them for weapons.

"I don't know how many things like that there are in Xandulu, the sleeping science of the elder races. But even that one thing, Brandy, would be deadly, if men from our world got control of it—men of a certain stamp! Even Bak-Toreg is doing pretty well with it.

"We found another thing that destroys the globes. We didn't sleep any more that night, of course. We sat there by the fire, watching. And just before sunrise we saw three more violet globes skimming along toward us from the direction of the Well.

"As the sun rose, they dropped lower, tried to keep in the shadows of the ruins. But a ray of it caught them, and they all three exploded like the one I shot. The etheric disturbance of sunlight must be enough to disrupt their equilibrium.

"That meant we would be safe enough in daylight, unless Bak-Toreg had another ace up his sleeve.

"The runway wasn't really finished, but we contrived to get in the air yesterday evening after almost cracking up in a couple of premature attempts. Sue was desperately anxious to get away before night.

"And that's about all, Brandy, except what you saw. We were trying for France and a fast ship for the States. Dad left me some land, you know—his country place on the old Camino Real, down the peninsula from San Francisco. Thought I'd try the simple life for a while. Sue needs a quiet place to stay for a year or so, while she's picking up our language and customs. I'm anxious to learn exactly what it is she came to warn us of.

"But Bak-Toreg overtook us with his 'Thousand Faces,' as she calls them, and she thinks he will again. That's why I asked you to race for Marseilles. I want to be as far as possible from Africa when the sun goes down.

"And it's already getting mighty low."

Miles unfolded his tall body and stood up. As he spoke to Su-Ildra in her own melodious tongue, there was concern in his greenish eyes, and a tenderness I had never seen there before. He shook his head at her apprehensive reply and smiled at her.

Then the two seemed drawn together by a quick current . . . . They had the deck alone, but for me; and an invalid does not matter. The passion and the agony in that embrace revealed their premonition of the weirdly terrible disaster that overtook us despite all our efforts.

CHAPTER V

The Screaming Spheres

● Midnight had passed. Again the sky was pellucidly clear, and the cold, broad crescent of the waning moon bathed the quiet sea with silver, rising at the end of a track splashed with soft, molten flame. I was in my usual chair upon the foredeck, swathed in rugs and useless as a baby.

My crew, on common occasions, are loyal and brave enough. But those who had not witnessed Miles's combat with the violet spheres had heard of it. And when they knew that the weird instrumentalities might be expected to appear again during the night, they discovered a praiseworthy ingenuity in finding excellent reasons for staying below decks.

Some of the men, in fact, proved more superstitious than I had supposed. Carlos brought me word of dark hints that all hands would be safer if Miles and the girl were put off in a boat. Even canny Captain McLendon informed me, rather circumspectly, that while he was going to sail the yacht as usual, and while he was not objecting to the presence of our new passengers, he did not feel that it lay within the province of his duties to try to interfere in case the bubbles came again.

But in any event, we could hardly have offered effective resistance. There were almost no weapons aboard. And we knew little indeed of the timeless, brooding terror that menaced us from forgotten Xandulu.

Miles and the girl were both upon the foredeck with me, white-faced, tense, strained. I watched them, walking side by side with short, nervous steps, talking in breathless, broken tones. Sometimes they stood for a little time by the rail, staring apprehensively across the moonlit sea, or sat restlessly for a few minutes in the deck chairs.

Seeing how weary they were, I had tried to persuade them to go below. But Miles had refused.

"I want to be ready, if *they* come," he said. "No use to hide Sue. A cabin door would be no protection—not against the spheres."

He had borrowed a heavy revolver from Captain McLendon; he wore it buckled in its holster at his hip. The burden of defending the girl rested upon him alone. I had neither weapon nor strength to use it. The others had made it plain that they were seeking no trouble with the astounding spheres.

The three of us were alone upon the deck. McLendon was in the wheelhouse

behind us, with one seaman; the rest were below. It was the man at the wheel who first saw the globes.

"Good God, sir;" I heard him gasp in dismay. "*They're* coming."

He was pointing to starboard. Looking in that direction, I saw the swarm of approaching globes. Up from the south they came, over the moon-bathed sea. At first they were very small, a swirling cluster of violet sparks, driving down upon us as if borne upon an unheard wind. They grew into shining spheres.

"The Thousand Faces!" Miles muttered, in my direction.

With a calm intensity of manner, he turned to Su-Ildra and put both his hands upon her shoulders and looked into her dark, pensive eyes with his greenish ones. He murmured something to her, in her own language, and abruptly was spread across his face that familiar, reckless grin, twisted by the old scar. She cried out in a protesting, heart-broken voice, and he drew her lightly toward him, and kissed her. She clung to him.

"Don't worry, Sue," he cried in English. "You're never licked till you think you are!"

Then he left her and ran up the steps to the wheelhouse. The pitch of his voice was low and tense; I did not understand what he said. But I did hear McLendon's gruff-voiced reply.

"No, Kendon, 'tis no fight of mine. If 'twere men, now—but them flying lights! I canna do a thing."

And again the murmur of Miles's voice, low, almost pleading.

"I canna do a thing," McLendon repeated. " 'Tis the lass, they want, isn't it? Perhaps ye better let them take her. Such things—no good will come of fighting them."

Miles snorted then, angrily, and hurried back to me.

"Brandy," he appealed, "can't *you* do something. That old shell-back acts like he considers the globes a flight of destroying angels! Not that they don't look strange enough, but several of the men have guns—"

I tried to explain the difficulties of my position.

"They are too frightened to do anything," I said. "In fact, some of them wanted—well, to put you and Sue off in a boat. And I'm just a sick man. McLendon is the master. On the high seas—"

Miles moved his great shoulders with the impatient restlessness of a baffled animal. He started away, and then turned back to speak to me.

"It's all right, Brandy. I see you can't do any more. And I appreciate a lot what you have done!"

He strode nervously back to Su-Ildra who stood watching the spheres breathlessly.

● Now they were near, and the violet radiance of them strangely tinted the moonlight. In a little bright cloud above the ship they clustered and slowly descended—scores upon scores of shining, iridescent globes, bright, yard-thick bubbles, half transparent, swarming down upon us. They oppressed me with a sense of the shadowy and brooding power of the alien, unguessed menace of Xandulu behind them.

Above the throb of the engines, I could now hear the sound they made, an insistent, high-pitched vibration. It suggested the humming of innumerable bees, but it was immeasurably keener, more metallic. As they sank lower, their continual mingled voices became an endless, indescribable scream.

In each of the shrieking bubbles was mirrored—the face.

A yellow face, drawn, seamed, incredibly old, it was. Except for the thick, densely black eyebrows, it was hairless. The nose was a beak, yellow and thin; and the thin-lipped mouth was tight and cruel, like a slit in dried yellow leather.

The eyes offered a note of singular contrast to the malevolence incarnate of the face. Soft, liquidly golden, they were limpidly mild and clear. From the twisted yellow mask of the face they twinkled with perpetual gentle inquiry.

The contrast of their mildness but deepened the yellow evil of the face.

Identical in hideous feature and malign expression, the same face stared from every shrieking bubble. I know that they were but optical images, uncanny projections of the senses and the power of the insidious Bak-Toreg, who was still in Xandulu.

From the wheelhouse I heard a shriek and the sound of a scuffle. Then, screaming, chattering with fear, the seaman who had been there with Captain McLeadon dashed for the forecastle companionway.

"The faces . . . . the faces . . . . the bloody, staring faces . . . ." his cries rose out of the ship in a monody of mind-shaken horror.

I myself was weak and sick with fear. I felt a shuddering, mad desire to flee down into the ship and hide myself from the terror of these screaming, shining invaders from a world unknown, from the menace of those baleful, yellow faces. But my old devotion to Miles Kendon made me stay upon the deck, even though I was helpless to aid him.

The bright spheres were settling about the radio masts. Beside the white, trembling Su-Ildra, Miles flung up his borrowed revolver at arm's length. It barked. Following so quickly upon the report that it seemed an echo of it, was a crashing detonation. A flare of blinding purple lit the deck with the momentary vividness of lightning, and the lowest of the shrieking bubbles was gone.

Thus began a desperate and uncanny —and a hopeless—battle. Useless in my chair, I watched it. Miles and Su-Ildra stood alone, side by side, on the deck. Obviously, the pallid girl was in extreme terror; but she showed no panic. Sometimes she spoke to Miles with high, determined courage in her voice.

Relentlessly inexorable, the shrilling globes were sinking over the deck, the yellow, hate-twisted face glaring from every one. Miles was firing at them with deliberate swiftness. Every shot was followed by a sharp splintering crash, and a lurid purple flare that rent the night to give me a glimpse of the appalling scene.

The spheres were striking back. Rippling cascades of green lightning rained down from them upon Miles—jagged bolts of virescent flame, searing livid scars across the darkness, destructive energy transmitted through the spheres by the alien science of Xandulu.

The inevitable end came soon.

The revolver was empty. Miles was fumbling hastily for more cartridges. A hissing green bolt stabbed down, struck him—so it looked to me—upon the old scar on his temple.

He cried out with a short, sharp sound of pain that was abruptly strangled. His long body sagged, and the empty gun clattered from his limp hands. His knees buckled slowly; he toppled forward.

With a breathless little moan of silent agony, Su-Ildra caught his lax body in her arms and lowered it tenderly to the deck. A moment she bent over it, caressing his still face with her hands. I heard a few sobbing words in her own melodious language.

Then, in pro d and pitiful defiance, she stood up beside him and looked calmly at the descending spheres.

● The eldritch, violet radiance of the globes illuminate ' the deck; the air was vibrant with their shrill, incessant vibration. Miles lay there in a still heap and the girl stood beside him, fear upon her strained white face, yet brave, calmly defiant.

Down about her swirled the globes. Somehow they suggested a swarm of gigantic, unpleasant insects. Upon the yellow faces in them—all identical, bewildering reflections of the same hideous original—I read mocking, evil triumph; demoniac, satanic! The inquiring mildness of the golden eyes but emphasized the impression of malignant power victorious.

One of the globes hung directly over Su-Ildra.

Abruptly it changed. The image of the insidious face vanished from it. It expanded to twice its former diameter, became a gleaming bubble of violet, six feet

thick. Its whining song grew louder, deeper-toned.

Then the girl was lifted.

As if by an invisible force of attraction, she was swept up from the deck beside the limp form of Miles, drawn into the violet sphere. Surrounded, imprisoned by its iridescent walls, she was carried upward into the night.

High above, they drove off southward toward the rim of the moon-washed sea, toward the distant mystery of Africa—and awakened Xandulu!

Yet Miles lay motionless. With a cold fear that he was dead, I pulled myself up from my chair and tottered across the deck to where he lay. His whole body was lax, horribly limp. His breathing had almost stopped. Putting my hand inside his shirt, I found that his heart was beating very feebly—but beating.

The ship's discipline was very much disorganized. But at last, McLendon got some of the men to come back to the deck. They carried Miles below, and we undressed him, put him in hot water, and administered the stimulants we had available.

His heart strengthened steadily, and when we put him in his bunk, he was sleeping almost normally. I happened to be sitting near him when he at last awakened after many hours. His greenish eyes twinkled at me quizzically; for a moment he grinned the old, twisted grin. Then a shadow crossed his face, as if with sudden memory.

"Where's Sue?" he asked faintly. "Did they—"

"The shining globes carried her away."

Grim determination hardened his face.

"Then, Brandy, I'm going after her," he whispered.

● We steamed on to Marseilles. There Miles, completely recovered, cabled home to San Francisco for funds and presently negotiated the purchase of a new airplane. He came back aboard for a while on the night before he left.

"I'm going back, Brandy," he told me. "Back to that city of gigantic ruined pylons beyond the High Atlas. I'm going to fly down the Well to Xandulu and take Su-Ildra away from that demon whose face we saw mirrored in the spheres."

In his greenish eyes was the old reckless confidence. He merely laughed at my startled protests.

"Luck, Brandy. I'll let you know when I get back."

So he left me, with the old, malicious grin on his face—my dearest friend, setting out to plunge into the sinister mystery of eternal Xandulu. I was sorry to see him go, yet I cursed the incurable malady that kept me from going with him.

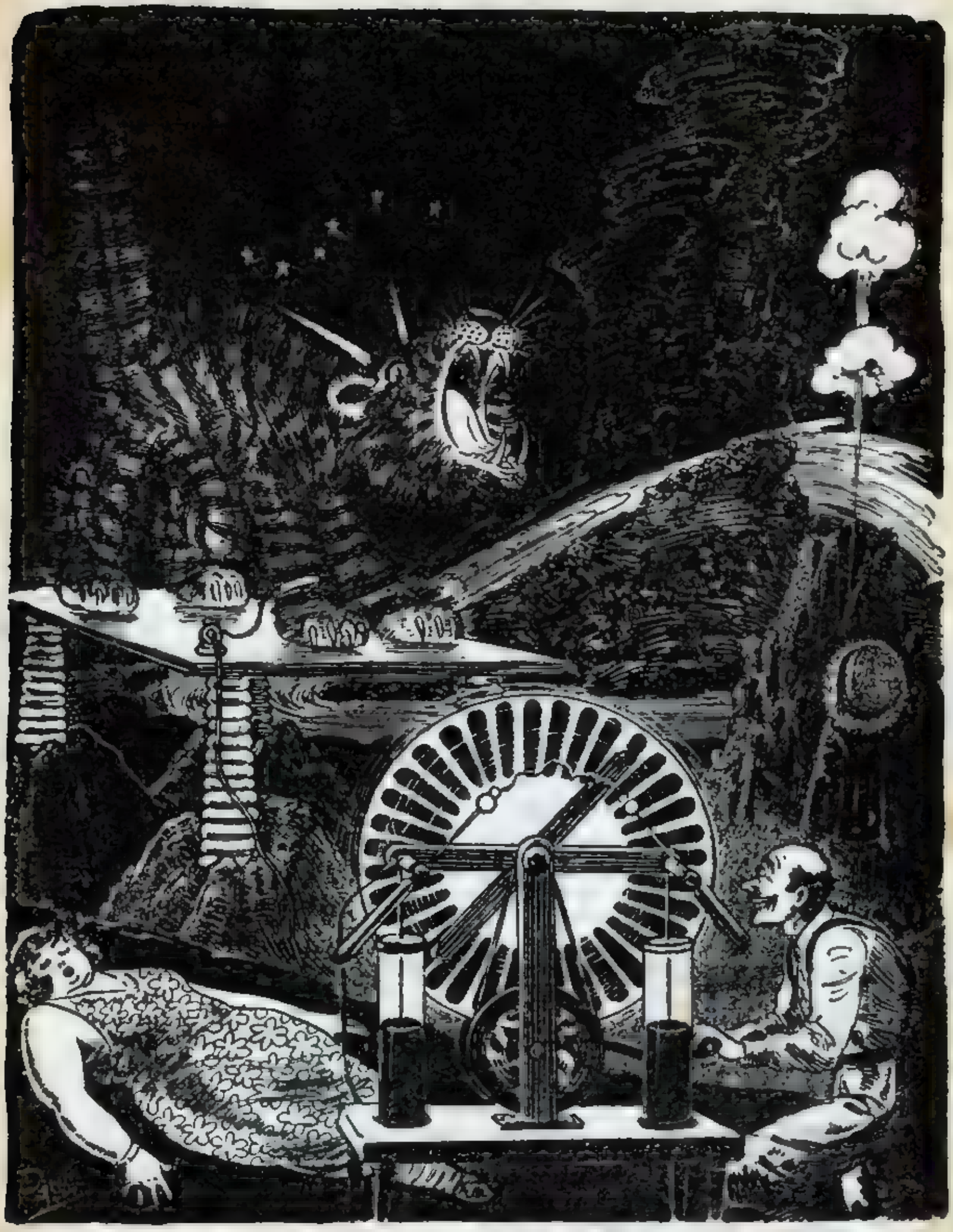
At dawn, his new plane rose over the harbor and vanished southward beyond the rim of the brightening sea. Anxiously I waited for news of him. But wearily the months dragged on, and Miles Kendon did not come back.

(Continued next month)

WHAT IS YOUR SCIENCE KNOWLEDGE?

Test Yourself by This Questionnaire

1. What is impenetrable to radio waves? (See page 805)
2. What effect has the Heaviside layer on radio waves? (See page 805)
3. What is the speed of radio waves? (See page 805)
4. What kind of a plant is the mold? (See page 819)
5. On what planet is "the Red Spot"? (See page 835)
6. Where on Mars does there appear to be moisture? (See page 846)
7. Is there such a thing as the human "aura"? (See page 919)
8. What is the law of inverse squares? (See page 919)
9. What is the heaviest element? (See page 920)
10. Give a few examples of the probable effects of space-travel on the human being. (See page 930)



(Illustration by Paul)

Ray charged the tiger, but his credit wasn't good.

THE BRAIN-EATERS OF PLUTO

By KENNETH STERLING

● Ray Williamson straightened up and looked around him. He was completely surrounded by Martians who were closing in. Being patriotic, they were all singing their national anthem, "Martian Through Georgia." Suddenly, Ray was struck with an idea. Quickly he took out his oofus-woofus machine* and shouted "Quick, Henry, the Flit!" Immediately, a flit gun appeared with which he sprayed the *insect-men* of Mars. The Martians being *insects,* perished. (No, I'm not an agent of the Flit Company.) But soon his ammunition was used up. (Why didn't he get more Flit with his oofus-woofus thing? Oh, I suppose he forgot about it.) He backed away covering his retreat with ray guns. Soon he came to a steep cliff. With a leap that did credit to his earthly muscles, he scaled it. He knew that it would take many hours for the Martians to ascend the cliff (we wonder why?) and in this time he could escape. If he could only reach his space-ship, *The Snail,* in which was his pal, David, and his girl-friend, Mary, he would be saved. On the other hand, if he were recaptured, he would be sent to the Brain-eaters of Pluto (allies of the Martians) where his body would be sacrificed to the terrible Flaming God (pretty classy name, eh?) and his brain (if there was one) would be devoured by the spider-like Plutonians. How horrible!

Finally, after what seemed an eternity (but which was really only two minutes and forty-one and a half seconds) he reached the ship.

Mary was standing in the doorway (or was it air-lock?), and when she saw Williamson, she rushed forward and they clinched (time out). Suddenly he heard a shout of warning from Dave. He unclinched and looked up to see the Martians coming out from behind bushes. It was an am*bush*cade! He fought bravely with his two ray guns—the Chek and Dubl Chek rays, invented in nineteen hundred and clam chowder. But suddenly, the paralyzing ray of the Martians flashed out and Ray was delivered into merciful oblivion.

He awoke to find himself chained to the wall in a gloomy cavern. Next to him was Mary who was still unconscious (as usual). As no one else was in the cave, he concluded that Dave had escaped with the rocket ship. (Such wisdom!) A guard came in with some food. Now Williamson noticed that the Plutonian was rather nervous, so when the food was served,

*Matter is a form of energy. No; energy is a form of matter. Maybe *I'M* wrong. Well, anyway, this here oofus-woofus machine could produce anything you wanted.

● **It is a distressing but guileless exposition—*allez-vous-en* our Einsteinian times, that contemporary authors are wont to use machicolative conceptions in the furtherance of their plots.**

They runcinate throstles, they use aromatic thyme, they runcinate their heroes in scrivener fashion, until the reader becomes mentally pyogenesed.

These loxodromic mystagogues and lotophagi have too long played upon a longanimous public. It is not our purpose to turn lexicographical, nor commit *lese-majeste* on some of our levorotatory inspissant authors.

But the present *chef-d'œuvre* epistemologyses this idea very *point-de-vice.* And if in parts it may appear eucurbitaceous, this should be ascribed to Plutonian claustrophobia and its resulting aphaeresis during aphelion with Neptune.

Caveat elector!

he shouted, "What, no spinach*?" The guard fainted. He tried this on the new guard hoping to eliminate the Plutonian race, one by one, but it was unsuccessful. Then he thought that he could annihilate the race by hand-to-hand battle, if he could only get them to come into his den one at a time. "Why'ncha come up an' simmee sometime?" he urged, but the Plutonians were stolid.

Then one of them dragged Mary away. "You blasted Plutocrat!" he shouted. "Youse is a viper! Why you snake—I mean Plutonian—in the grass!" They paid him no attention.

Then he began a plan of escape. First he broke the chains that fastened him. He took some granite from the wall and ground it into powder. (Whataman!) Now if he could get some hoochy-koochy acid in which to pour the powdered granite, the elasticity of the air would be increased and the cosmic rays could pass through more easily, causing a decrease in the intensity of the ultra-indigo rays. This would result in a bending of the infra-red and ultra-violet rays through the fourth dimension into space-time. The absence of these rays would change the frequency of the electro-magnetic waves causing a refraction of the remaining light waves, etc. After all that had been undergone, the Plutonians would become hypnotized and would remain in this condition until the hoochy-koochy acid evaporated and the elasticity of the air was un-increased, etc., etc., etc., and etc.

But how could he get some hoochy-koochy powder? Ah!—that was the question—the powder or not the powder? Finally he was struck with another idea! (Strike two!) He poured the tomato juice (from his meal) into the Pluto water. This he dumped into the ice cream. He mixed this together with the powdered granite, and before his very nose, the elasticity of the air was increased, etc. (See preceding paragraph.) All the Plutonians in the vicinity were paralyzed—or was it hypnotized?

*Spinach—a green Earth food now extinct (thank goodness!)

Ray Williamson stole into the temple (the crook!). He saw Mary's body on the alter with a cut in the head. Her brain had been removed! But, perhaps, if the Plutonians had not already devoured the brain (horror of horrors) some Earth doctor could replace it. He came to the pot of liquid where Mary's brain should be. He took out his pocket microscope and the search began. Finally, he found the brain just as it was about to be swallowed by a protozoan (a Plutonian protozoan, mind you. No wonder it was a brain-eater) which was swimming in the liquid. He placed the brain in a capsule which he put into his vest pocket (or was it the east pocket?). Then he took the inert* body of Mary in his arms and scrammed. He left the cave (or was it a cavern?) and emerged into the frozen landscape of Pluto. Perhaps you wonder how he could stand the extreme cold of Pluto. Well, let me tell you, he could take it! You may also wonder how he could breathe on this airless world. Well, keep on wondering; how am I supposed to know? I've never been there. Anyhow, I'm only writing this story—I've got to leave something to your imagination. Well, as we were saying—*we* saying? No, that wouldn't be correct; because *I'M* telling this yarn. Then, as *I* was saying, or rather *writing*—or still better, as *you* were *reading* (or is it *youse?)* Well, anyway, let us continue. *Us?* Let *me* continue. That'll be enough of that!

● Meanwhile, Ray was stumbling over lakes and rivers, climbing hills and valleys, etc. "I wonder when the Plutonians will become un-hypnotized?" he thought. "It's terrible—I'm a fugitive from a brain gang!"

As he strolled along, he met a Plutonian tiger. The tiger growled at him. He laid Mary down on the ground and yelled, "Hold that tiger!" Then, noticing the tiger's animosity, he called out, "Y'wanna fight?"

*Inertia is the condition of a body which has been submitted to an extreme state of re-instapulation. This produces exmultitemporaneous-constapulatory-superlativity-confuriolidosciousmes. (Where did I learn that?)

"Do you?" asked the tiger with a Boston accent.

"Yer yeller," said Ray.

"Oh, yeah?" queried the tiger.

"Yeah!"

"Sez who?"

"Sez me!"

"Start somethin'—I dare ya!"

"Why don't you?"

"Oh, yeah?"

"Yeah!"

After three hundred and forty-one more yeahs, the tiger yelled, "Knock this chip off my shoulder!"

"Oh, yeah?"

"G'wan, do it."

"There, I did it!"

Then the fight began. The tiger charged Ray. Ray charged the tiger, but his credit wasn't good, so he socked him in the bread-basket.

"I was bread in old Kentucky, but in Boston, I was beans." the tiger said, attempting to distract Ray's attention. Then he butted Williamson with his horns (note: Plutonian tigers have horns) where people don't like to be kicked. He kissed the canvas. The victorious lion (I mean tiger) stood above him and twisted his mustache. "Heh, heh!" it laughed with a wicked look in its eye. "I shall return you to the brain-eaters of Pluto."

Ray Williamson was desperate. He glanced at his watch. It was nine a. m., Earth time. An idea struck him. (Strike three! You're out!) He did some rapid mental calculations. "I'm glad I studied my arithmetic as a kid," he thought. His plan was this: Plutonian tigers, he knew, were awake only at night. In the day, they slept in coffins, like vampires. Now, if he could stall off the tiger until daylight (saving time), it would have to return to its coffin and he could escape.

"Say," he said addressing the tiger, "did I ever tell you the story about the traveling salesman who (censored)." After what seemed an eternity (but which was really only about two and a quarter shakes of a lamb's tail) daylight arrived.

"Curses!" shouted the tiger, "foiled again! Well, I'll be seein' ya," it said as it disappeared. It vanished into the thin air! (No, it couldn't have done that—there wasn't any thin air to vanish in!)

"Not if I see you first!" exclaimed Ray, as he gathered up the (dis)graceful Mary.

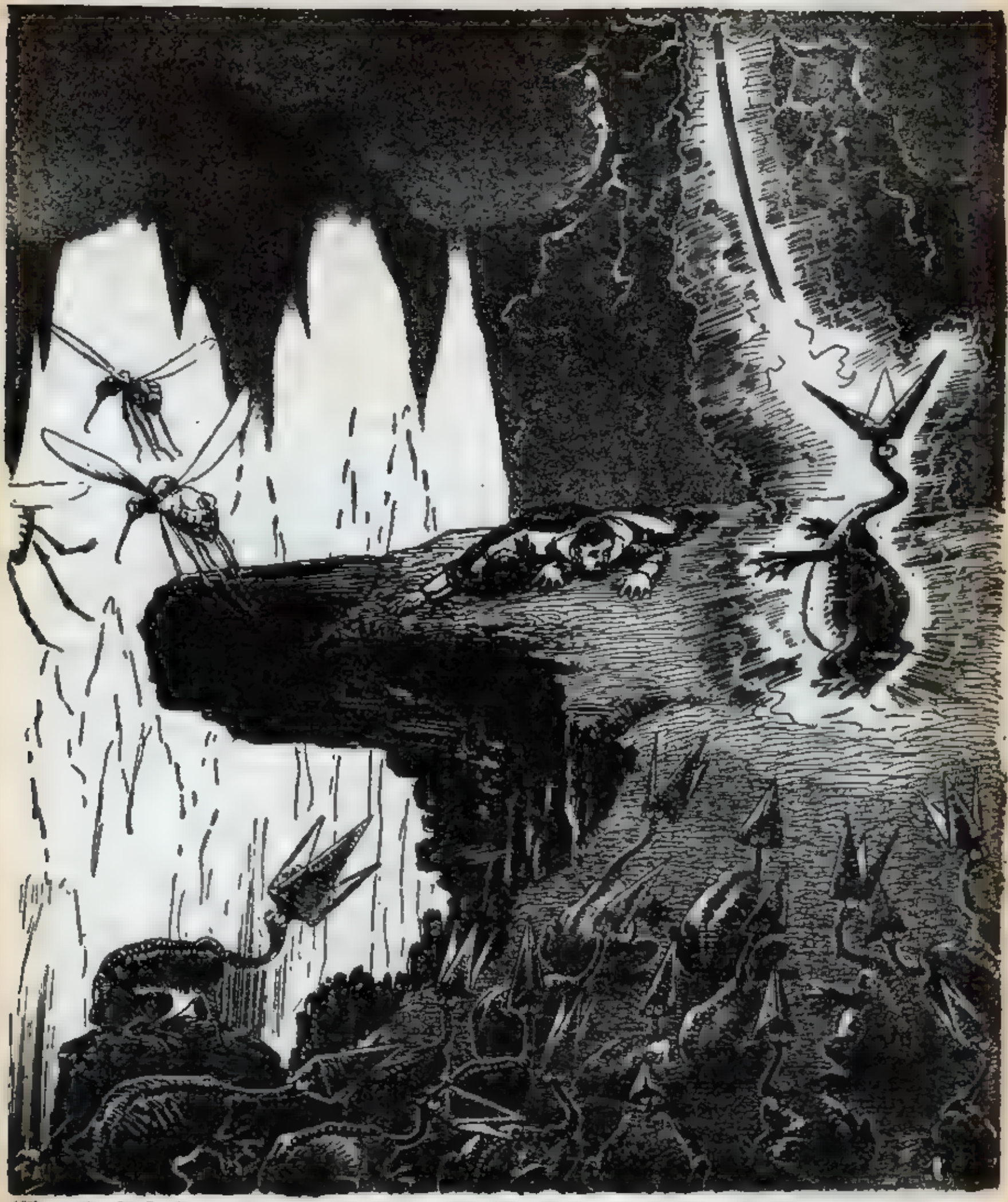
Then he began another flight in which he again had to climb rivers and swim mountains. At last he reached a spot where he felt secure. Then he began the somewhat hopeless task of building a spaceship. He fashioned crude implements out of stone. He made himself a razor, for he had grown quite a beard. Even Unconscious (as he had learned to call the brainless Mary) was beginning to grow whiskers. He wouldn't risk shaving her, however, as he had a vague hope that he could some day sell her to a circus as the bearded lady.

After about a year of steady labor, he had constructed a set of rocket tubes made of hollowed branches and bamboo poles. One day this caught fire and burned up. Was Ray sore? You're asking me! He cursed and swore for a week without stopping for meals or sleep. You can bet your life that he was careful of where he threw his cigarette butts after that.

● Finally, after many years of impatient labor, he had built a space-ship. It was made mostly of stone except for the rocket tubes, which were wooden and bambooen. He found that by mixing certain juices from uncertain herbs with various kinds of earth, or rather pluto, and letting this dry, he would have an explosive so powerful that one tenth of a gram would annihilate fourteen solar systems in a split second, if misused (so *HE* says). He planned to wait until it rained before setting off, so when he went out into space, the water on the sides of the ship would freeze and the ship would become airtight. Everything worked swell and soon they were speeding on their way back to earth! On the way, he ran into the heads of twenty-one comets and the tails of four. Heads win!

When they reached the earth, Ray learned that men no longer had tonsils or

(Continued on page 914)



(Illustration by Paul)

Tremendous static electricity raced down to the highest point of contact, and that happened to be King Tharg.

CHILDREN OF THE RAY

By J. HARVEY HAGGARD

● Mr. Haggard's stories are outstanding for their logical explanations of unsolved scientific mysteries. After reading one of his yarns you are inclined to believe that there probably is a good science-fiction story behind many an unexplained enigma that stumps our scientists.

In the present tale, Mr. Haggard tackles the red spot of Jupiter. As no one has any definite proof as to the nature of the red spot, or its cause, Mr. Haggard's answer to this riddle is very possible, and may really be the true facts for all we know. However, there is nothing technical in the story. Rather, it is the exciting relation of strange exploits upon an alien sphere, with all the accompanying weirdness and adventure of a Haggard yarn.

● "Captain, let's descend. Let the space-ship down into those swirling, glowing mists. Think what it means to science!"

Captain Dane looked first at Professor Bablon; at the intelligently lined features framing his shining enthusiastic eyes, at his upper body suffused in a rosy radiation from outside the transparent glassite space-window in the forward control room, and then he, too, stared downward.

Below them lay the famous "red spot" of Jupiter, which their scientific expedition had intended to photograph and make spectroscopic studies of its radiation on their spaceographical tour of the Solar System. The secrets of the "red spot," however, seemed rather to have eluded them. Upon their arrival at Jupiter, and the subsequent close scrutiny of the red spot, they had found that the entire area was covered by high thick clouds, through which the crimson radiation suffused. Nothing at all could be seen of the Jovian surface through the clouds. Captain Dane had the responsibility of the safety of his passengers on his shoulders, and he hesitated at risking the unknown perils of a descent into the glowing clouds.

Directly below the space-ship lay a sea of fiery mists, pitching and tumbling crimson tongues to the inner mysterious fires of Jupiter's red spot. Above, the sky was pitch black. And beneath was only this tumbling expanse of suffused illumination. But only grim sagacity remained written on Captain Dane's harsh, almost puritanical features. The professor was prejudiced to his science. Captain Dane thought of the leviathan torpedo-shaped space-ship, now limned in the upper darkness by the illumination from below, with green riding-lights gleaming from the upper dark portions of her broad curving body like the multiferous eyes of a marine monster.

He shook his head.

"Primarily," he said, "our excursion is devoted to science. But there are a hundred people aboard, including the scientific force and the crew. Down there, God knows what. I owe my men the protection of unbiased judgment. Neither my conscience nor my sailing instructions would permit such a digression."

Professor Bablon radiated his disappointment. He peered down into the swirling mists through a spectroscope, and his piercing gray eyes filled with excitement. "I'd give my life, or most of it, to be able to define that unknown spectroscopic ray from the red spot," he sighed.

At this, a young man in the garb of ship's officer came forward from the shadows of the control room. There was a suggestion of quiet force and unwasted mo-

tion in his smoothly deliberate advance. He was young and lithe, his features clear and ingenuous. His blue eyes sparkled with intense scientific interest. He had been watching the spectacle below from a corner of the space-window and had overheard the conversation.

"If I may suggest, sir," he said, saluting the Captain. "There is a way, sir. There is the observation sphere, used for sounding altitudes through cloudy depths. One might dangle in it, lowered from the ship above, and study the terrain at closer view, perhaps take photographs, yet in no way endanger the rest of the passengers."

"Great!" cried Bablon, wheeling with face alight. A roseate bulb from the control board cast a chance ray upon his features. His hair was turning slightly white.

"But it would take an expert operator as well as Professor Bablon himself," protested Captain Dane.

"I might suggest myself, sir," returned the young man.

"Excellent," cried Bablon. "You can't refuse this, Dane. I beg of you."

"You would be taking your life into your own hands," said Captain Dane. "Very well, if you persist, Lieutenant Connor."

He shook hands with them before they left the bridgeway, revealing that he sympathized with them in their venture, even though he could not sponsor a more thorough one. Then he went aft to give orders for the lowering of the observation sphere, while Professor Bablon and Lieutenant Connor obtained cameras and hurried down below into the belly of the ship. The transparent observation sphere lay in a large airlock, her cables rearing back to huge drums firmly anchored in the framework of the huge beryllium ship. Inner mechanisms of the sphere enabled the occupants to raise or lower themselves at will, an electrical circuit which controlled the winding or unwinding of the cable on the reel above. Upon a desk in the interior was a viso-phone with which they could communicate with the ship operators above who would direct the course of the ship. There was also a row of tanks to supply oxygen and other breathable components of atmosphere while the sphere dangled in impure stratas, but in the present case, it was unnecessary inasmuch as Jupiter's air was quite suitable for terrestrial consumption. Nevertheless, Bablon insisted that they open a valve directly after they had entered through a sliding door, and the hiss of air reassured them.

"Ready above-board, sir," spoke Lieutenant Melvil Connor into the viso-phone.

"Ready, sir," came the steady answer from the pilot's assistant above.

● Connor pressed the contact, and a great door in the outer airlock swung open into space. With a sudden rush of paying cables, the sphere swung free and descended swiftly, leaving Lieutenant Connor clinging to his chair, which he luckily occupied before the descent, with a breath-taking animation of spirits. As empty space seemingly flashed about him, he caught a glimpse of the broad belly of the *Trisonia* above vanishing into the dark upper night with her row of huge riding-lights becoming but a red line in the distance. He had a disquieting feeling of wonder about himself. In the first place, Connor was a married man, wholly devoted to his wife, though she was on distant earth, and his responsibilities to her loomed manifest in his mind. He had offered his voluntary services upon impulse, which he realized he should not have done in accordance with loyalty to her who was dearest to him. Yet he had been carried away for the moment by the thought of offering his services to science. Anyway, Connor would never have sought to compare with a hero popularly conceived by fiction writers who control every action with studied logic; he was but an ordinary man, governed at times by whims not entirely logical.

And he was really enjoying this wild descent with the thrilling ardor for unknown dangers which is part of every man's make-up. The observation sphere was like a huge drop of glistening crystal-

pure water, with the tiny figures of the men seated at chairs in its center, and through the transparent walls, which gleamed crimson from the illumination below, Connor saw the swirling clouds leap up. Then they were immersed with the blinding illumination of glowing mists outside, and Connor, who was controlling the observation sphere at the desk, slowed it up considerably. Professor Bablon, his lean hand nervously grasping the control desk, was staring expectantly downward.

Moments passed quickly in silence. Presently the mists began to thin and become broken. Through straying wisps, Connor caught glimpses of a steamy water-logged terrain far below, with soggy strips of moldy-looking earth bogging up here and there. They noticed that the metal objects within the sphere were glowing with a queer radiant phosphorescence, which had grown with the moments spent within the red mists.

In another minute they had broken from the mists and hung suspended in a broad expanse for which the clouds formed but a ceiling. A pinkish glowing yet adhered to all the metal objects of the sphere: Bablon's eversharp, the buttons on Connor's service coat, and the cable which swung down to support the sphere, as if to remind them of the glowing mists they had just penetrated. A bloated, flooded country lay spread below, flat and labyrinthed with waterways and lagoons, while far on the horizon, a single erect column of crimson light appeared to drive straight up into the ceiling of clouds from a main lake body, emanating from some unknown source below, as light shoots solidly from a camera lens. A blinding pillar of fire, it diffused its light throughout the ceiling vapors and reflected it in turn upon the shining waterways of the bloated boggy country which reared its stagnated surface to the eager eyes of the earth-men.

● Huge bunches of moldy substances loomed upward in close clumps from the splotches of earth below, which assumed the proportions of great plant growths as the observation sphere descended. Mold, which is really a bacteria plant, was enlarged to immense proportions upon this stagnated portion of the great continent, shut away from natural sunlight.

Huge gray and bluish spongy growths, bearing large glistening fruit-spores, thrust upward, their knobby leafless branches covered by parasites and other molds. Many types of inert plant bacteria were also represented, some of them in brilliant bloom of weird colors. Many were large and knobby, flaunting silken sprays from their crests. Others arose in spiked array, much like piked soldiery, while through clumps of vegetation, parasite vines clambered and twined much as live things do.

The sphere, under Lieutenant Connor's manipulation, came to rest above one of the waterways, bordered by gigantic flowers of crimson hues whose great corollas spread out to float on the slow turgid currents.

"Good God, Connor," cried Professor Bablon. "Look at that!"

He was pointing to a large green tetrahedron, scaly and gleaming, which had arisen from the water, supported on a slender tapering beam of the same dully scintillating color. It ascended straight upward for a distance of several feet, then came to a motionless halt. The upper point of the tetrahedron split slowly, and the sections spread back, like the corolla of a flower in bloom, revealing thin snake-tongue petals radiating from the center.

At this moment, their attention was distracted from the tetrahedron, but it was to be renewed in a surprising fashion before long. A huge insect, its body as large as that of a small dog, with a gossamer wingspread of twelve feet, fluttered by the sphere. Its thorax was bony and segmented. A long proboscis projected down from its beady head. After circling the observation sphere curiously, it fluttered down over the newly bloomed tetrahedron and inserted its proboscis.

In an instant, the tetrahedron closed again, snapping down over the insect, and

two huge sluggish eyes opened on a knobby portion of the neck behind the triangular head. The insect fluttered vainly and with no little strength. In the struggle, a great padded frog-like body arose to the surface with the writhing tetrahedron's neck, with gleaming webbed claws threshing furiously, tearing upward at the insect as it hugged it close to the water.

"What a horrible creature!" gasped Connor.

"But a clever subterfuge, to imitate a flower," returned Bablon. Meanwhile, the observation sphere was floating gently away from the scene toward the distant horizon where the blinding crimson pillar of light jutted into the heavens. "Clever! Gad! There's another tetrahedron, and another. The marshes are teeming with them."

Connor peered downward and discerned many beautiful corollas standing with deceptive beauty at the edges of the waterways, while down the central current many of the living tetrahedrons floated with the stream, a ready trap for unwary insects.

CHAPTER II

The Tetrahedron Creatures

● Bablon was enthused by the scientific opportunity of discovering an unknown land. "It's great! Great!" he breathed. He seized a pencil from his pocket and started to take notes. Then he stared. The metal eversharp had crumbled to a fine corroded ash in his fingers, and the ash emanated a soft crimson glowing. A sudden wild suspicion flitted through his brain. He rushed about the sphere, seizing metal objects. The buttons on Connor's coat, the metalwork of the camera, the metal portions of dials on the control desk, all crumbled to ash as he pressed upon them. With rather much of a wild mien, he seized the viso-phone and snapped the contact. It was dead.

"Good Heavens, Connor!" he shouted, wiping the beads of sweat from his brow. "My God! That unknown ray! It oxidizes metal almost instantly. The wiring of the viso-phone has suffered along with the rest."

Connor sprang to his feet. As he did so, he brushed against one of the metal oxygen tanks which lined the walls. With a soft explosion, it fell asunder and loosed a fresh abundance of pure oxygen. Connor had stiffened, frozen with fear.

"Bablon!" he cried in ringing fearful tones. "Bablon! The cable! My God!"

"Ascend!" shouted Bablon, even as Connor leaped to the controls.

For a moment, there was no response. Then the sphere shuddered in her every fiber, lurched sidewise and fell downward headlong. The cable had parted. The sphere lurched over in slow falling rotation; Connor had a sensation of swift empty acceleration. Then it caught up with a jar which threw both Connor and Bablon upon the bottom of the sphere, while the crimson world without was momentarily aberrated by a splash of water which surged up on all sides.

For a moment, they lay prone and breathless, while the sphere bobbed like a cork on the ruffled waters. Connor, who was none the worse except that the breath had been knocked out of his lungs, crawled over and helped Bablon to a sitting position. Bablon opened his eyes; at that moment, a huge tetrahedron head appeared in the waters below, close up to the transparent bottom of the sphere, its sluggish eyes surveying the terrestrials with evident surprise.

Bablon gasped, and it was several moments before he opened his eyes again. When he did, it was to see that several others of the tetrahedron creatures were floating about, their huge wicked eyes deliberately upon the earth-creatures who bobbed within the strange transparent cork so precipitately cast into their waters. It was evident that they were debating whether this was a stray bit of débris, or something animate, and therefore worthy of capturing.

Conner felt a strange sensation of deep dizzy depths as he stared into those

knobby eyes below the slimy green tetrahedron mouth structures. It was almost as if sentient intelligence lay there. He gazed at them with a fit of unreasonable fright. He wondered how long it would be before Captain Dane discovered that a useless cable dangled below the *Trisonia*. What would he do when he did? Perhaps he would become affrighted at the asby transformation of the cable, and there would be no attempt at rescue. Perhaps they would be left forever in this molded country beneath the crimson clouds.

At this moment, Connor's attention was again attracted to the tetrahedron creatures gathered in the water about; for they hovered close together, and he had a conviction that they were conversing in some manner of their own. From tiny holes beneath the sluggish eyes, minute streams of air bubbles were alternately spewing forth, for all the world as if the creatures were discussing the strange advent of this unusual bottled-up thing in their midst.

Presently, they placed their great tetrahedron heads against the sphere, and with a concerted movement, bore it along with the current.

● Professor Bablon had by this time quite recovered from the shock of the fall, and was daubing a bloody wound on his forehead with his handkerchief. Connor expected the scientist to show signs of intense fright or regret at having placed themselves in this predicament, and was intensely relieved to find that Bablon did neither, but was apparently accepting their situation in much the same manner as he himself was. The air had become stale in the sphere, and Bablon busied himself opening air valves in the side, too high up for the water to enter. Then they discussed their situation, and though they were rather disconcerted at the turn of events, they agreed to wait for a later opportunity of trying to escape from the sphere.

They were now being borne swiftly down a waterway, while the narrow winding shores slid behind, a never-ending vista of huge moldy growths, of glittering and gaudy insects and multitudinous flowers. Swarming fish life teemed in the waters. It was clearly evident that this world was lush with life. With a steadiness of purpose which told of a predetermined destination, the sphere was being pushed toward the great beam of crimson light which shot up from this land of unaccountable wonders to be distorted and diffused in the ceiling of clouds which hung constantly overhead.

The temperature was torpid and the humidity was high. Vapors arose from the surface of the waterways, and low strips of fog hung about the jungles of overgrown mold. Overhead, the crimson clouds heaved and tumbled uncertainly. Bablon ventured that the climatic conditions were tropical, and that electrical storms were probably frequent. As if to support his words, there was a distant rumble of thunder, audible even in the space-sphere, and it appeared to be raining on the horizon.

"Bad," said Bablon, shaking his head. "The *Trisonia*, even if it could escape the metal-crumbling property of the ray, would find it difficult venturing down through the approaching electrical storm."

Meanwhile, the sphere had been guided into a great open water front. Hundreds of tetrahedrons lay about the waters and turned curious eyes upon the newcomers. Much in the fashion of curious people, they swarmed about the sphere, which was being drawn toward a large irregular island upon which lay thousands of the tetrahedrons, who immediately reared their great triangular heads upon long stem-like necks from their toad-like bodies, and their sluggish eyes cocked speculatively upon the visitors.

Then the terrestrials gasped in astonishment. For long regular arrays of huts lay upon the island, huts formed of knobby stone structure which looked like lava. They were dwellings. The tetrahedrons were craning their necks from the door apertures and swarming out in very mundane fashion to sight the newcomers. There was a curious humming, an indis-

tinguishable murmur of many sound organs, as if they excitedly discussed the prisoners.

The sphere was borne up a waterway canal through the center of the village. Connor looked with dumbfounded eyes upon the thousands of huts which lay on either side. Waterways intersected at regular well-placed intervals, aqueous streets crowded with dwelling-places of the tetrahedron creatures. It was a gigantic metropolis of unaccountable intelligent beings. In the near distance, the crimson beam shot up into the sky, a pillar of light, and an object of insatiable curiosity for the terrestrials.

At last, a great structure, centering the tetrahedron metropolis, loomed huge and rough, a black craggy mass approached by a waterway leading into an arching tunnel. The sphere was pushed and jostled beneath this arc and through various branches of the waterway beneath the great building. A vague diffused light danced on the walls of the cavernous dwelling, reflected from the gleaming crystal-pure waters of the waterway. Suddenly, they found themselves being propelled down a long canal leading across a great chamber which resembled an amphitheatre, already rapidly filling with the tetrahedrons. On a central dais, surrounded by waterlanes, was a group of imposing creatures with gigantic swollen heads twice the size of those propelling the sphere. One more gigantic than the others sat in pompous state, evidently considered as a leader or king, and it was before him that the sphere was brought, coming to rest upon a flight of crude stone steps leading up out of the water to his seated pedestal.

● It was at once evident that a lengthy discussion was being passed back and forth between the tetrahedron creatures. Connor noticed that Bablon was staring intently into the great sluggish eyes of the king. Suddenly, he turned toward Connor with an exclamation.

"Telepathy!" he exclaimed. "Gad, Connor, he's speaking to us!"

Connor concentrated his will upon the yellow orb of the great creature and vague unformed thoughts twisted within his mind. He suddenly became aware of words forming in his brain as clearly as if some one had spoken them.

"Who are you?" came the startling question. "From whence do you come?"

Bablon turned to Connor and spoke swiftly. "Let me talk to him," he directed. "I've detected something in his thoughts. He is of a superstitious race and doubtful yet whether we are gods or whether we are something edible and consumptive to their palate."

He turned to the king.

"We are from beyond and above," he said enigmatically, gesturing vaguely upward. "From the land above the great mists."

"You look very much like the Grach-people," was the startling rejoinder.

"Who are the Grach-people?" queried Bablon.

"The people of the ray. Children of the color," returned the king. "I am Tharg, king of the Tatrons, and oft have I stolen up the river of warmth into the island of the ray and have seen the Grach-people who dwell by the boiling lake of the ray, but never have I encountered or seen such as you."

CHAPTER III

The Mystery of the Ray

● "We live on a land in the red mists," cried Bablon, thinking it wise to aid any superstitious belief they might have concerning themselves.

"Are you then the spirits of the dead Grach-people?" queried Tharg, leaning his great tetrahedron forward on his neck and blinking his huge eyes in attentive interest.

It had become evident to Bablon that the tetrahedron people were separated by some religious or superstitious gulf from the people who dwelt on the island within the ray, if there were such people. So he denied that he was the ghost of the Grach-people.

"No!" he said emphatically. "We are

the spirits of your people; of the Tatrons."

Tharg recoiled. There was an angry buzzing murmur of conversation between the tetrahedrons, audible through the open air valves. Finally Tharg turned.

"That is a lie!" he cried angrily. "You are spirits of the Grach, and you made a mistake and did not descend into the ray. Our spirits do not ascend to the mists; they dwell in the boiling underground water caverns deep in the core of this world."

Professor Bablon saw that he had stumbled, and sought to rectify his error.

"We have not told the whole truth. We have come from far above the mists; from another world!"

"Liar! Base liar!" snapped Tharg. "There is nothing above the mists. And some of our people saw you fall from the mist-land into the water."

Bablon subsided into silence, looking at Connor and shrugging.

"Well," he said aloud. "I guess that settles our being gods."

"What's the difference?" said Connor. "We'd probably have to fight our way out of here, anyway. And we're weaponless. This crowd doesn't look like a picnic gathering."

Bablon agreed. The thousands of tetrahedrons swarming the amphitheater were working themselves into a state of vicious anger, if their attitudes portrayed their inner feelings. An angry murmur arose. Tharg consulted with his fellow tetrahedrons. Finally he turned on the terrestrials with the mien of a judge at last arrived at his decree.

"You are gods of the Grach-people," he announced bluntly, as if that score at least were settled. "We do not wish to anger you, nor do we wish you to be among our peaceful people. So at the next dance of the ray, when the gods in the mists above roar and throw darts of fire at one another and the Grach-people gather on the island for the spirit dance, we shall set you among them, and see whether you are their spirit-gods or not."

Bablon became very curious at this decision, and asked many questions concerning the Grach-people, Children of the Ray. But Tharg was contemptuous in his belief that Bablon was trying to pull wool over his eyes.

"Take them away," ordered Tharg to the attendants in the stream. "Keep them under guard till the gods of the mist-land roar out the time for the Dance of the Ray-children."

"Just a moment," cried Bablon. Then he sought to communicate to Tharg a need for food and water being placed within the sphere for them. To his surprise, Tharg acquiesced readily in complete understanding and assured him they would be fed.

● Then the sphere was pushed back down the waterway through mobs of splashing tetrahedrons, some of whom opened corolla-like mouths to snap at the glassite surface, but the guards pushed these back roughly. From the main audience chamber, they were moved up waterways which intersected like so many corridors, to a dark canal ending in a low-arced doorway. Beneath this arc they were led into a cell-like, shadowy room, barely illuminated by the phosphorescent quality of the water, and their sphere was pushed upon a dry rocky shelving at the rear of the chamber. Three of the tetrahedrons stationed themselves in the water below the arc-way as guards, while the others hurried off, presently to return bearing a quantity of vegetative substance in their huge mouths. This they deposited upon the rocky shelving beside the sphere, and left.

"What in the name of mud—" began Connor.

"Food," cried Bablon. "It's the food we were promised."

After discussing the advisability of leaving the sphere's protection, Connor decided to chance it. Opening the sliding door, he dashed out. For the first time, he noticed the heavy gravity of Jupiter tugging at his muscles. Heretofore he had been supported wholly or partially by the sphere's walls. Now he staggered beneath

a great weight. Seizing an armload of the weedy substance, he clambered clumsily back and slammed the door tight, much to the obvious astonishment of the guarding tetrahedrons.

They found the queer substance edible and palatable, though unfragrant. One of the tetrahedron creatures who had brought the vegetable matter presently hurried back. He opened his large flower-like mouth and deposited several gleaming water-fish by the sphere, grotesque and obviously dead; a spectacle wholly unappetizing to the terrestrials. Bablon sought to converse with the tetrahedron mentally.

"You are a Tatron," he began.

The sluggish eyes turned to fasten on Bablon. "Of a surety."

"Then you know something of the island within the ray; of the Children of the Ray. What is the ray? Whence does it emanate?"

The tetrahedron evidenced immense surprise at these questions, but at length reluctantly replied.

"The ray is the eye of Tatra," he said. "Tatra, god of creation and source of energy. The Children of the Ray are slaves to him. They live from the offerings to the almighty Tatra, feeding from the scalded bodies which wash up from the waters of the ray."

"Scavengers!" cried Professor Bablon.

The Tatron hesitated. It was evident that he did not wholly comprehend the meaning of the term. He appeared to be displeased, then disregarded it.

"We, the Tatrons, are the true people—Tatra's people. Many, many generations ago our ancestors came from the ray. Our seed is generated from the ray. Eventually, when we are old and helpless, we shall return to the ray. Our bodies shall be cast up from the burning water, but our spirits will never arise. They will descend forever downward to the everlasting happiness of Tatra's kingdom beneath the ground, and our bodies will wash up on the shores of the burning lake on the island, to be devoured by the slavish Children of the Ray."

This oration had been delivered stentoriously and with much inner feeling, but Bablon didn't get much out of it. He looked at Connor and shook his head. "Beyond me," he said. The terrestrials were made to understand that the Ray was the whole source of the Tatron's theory of existence. Energy and creation came from the Ray. Bablon asked with some curiosity why the Tatrons were afraid of the Ray if it was their essence of creation and existence.

● At this, a series of frightened awed thoughts came jumbling from the tetrahedron's mind. It was plain that he was afraid of the Ray, yet revered it. He feared the Children of the Ray because they were inviolate as slaves of his god.

"The Ray is the beginning and the end," he said at length. "Yet we who are the real people love our life. We would not have the ending bordering swiftly on the skirts of the beginning. We love life. Therefore, the Ray, which is ever-changing, is not for us till the end. Tharg is beginning to lose fear. Soon he will go again into the Ray, never to return, and another will take his place."

"Go into the ray!" ejaculated Bablon, not comprehending the vague reasoning. "But he fears it!"

"All fear it," returned the tetrahedron. "Yet all must go back, back to the beginning. And Tharg will soon go back to the Ray, which is the beginning and the end fastened together."

"But look here," cried Connor suddenly. "What of these Grach-people? Will they welcome us into their dance, this Dance of the Ray?"

"Welcome you!" exclaimed the tetrahedron. "Welcome you who have deserted! Welcome the spirits, who are neither the beginning nor the end! No—they will drive you back, exorcise you into the lands of mists above."

The tetrahedron left them in a maze. Bablon tried to form his ideas of the crude religion of the Tatrons upon the basis which all superstitions originate. In some respects they were identical. The

eternal circle of life was obvious, yet the emphasizing of the difference between the beginning and the end, with the interim cycle between, was confusing. Only one point was evident. A race, somewhat similar to themselves, lived on an island which was in the center of the territory from which the Ray shot upward. During a religious dance in which the Tatrons worshiped their God of Creation, Tatra, the sphere would be pushed into their midst, so that they, if they were indeed spirits of the Children of the Ray, could be exorcised back to the spirit-land in the mists above.

"This Ray itself," cried Connor. "What do you make of it?"

Bablon shook his head.

"I don't know," he said frankly. "The red spot of Jupiter has always emanated a ray which could not be defined through a spectroscope. This ray evidently has the peculiar property of rapidly oxidizing metals. It is perhaps for this reason that the country is so moldy and vegetative, all the metal ores having oxidized. Yet the source of the ray is something I cannot understand. I think it must be some chemical accident in the body of Jupiter itself which emanates these rays; rays which for some peculiar reason are invisible until they strike the waters of this curious 'red spot' region. Perhaps the frequency is altered by liquids, changing to visible light. And I'd give half of my life to know and return to earth with a knowledge of this ray, or even communicate with earth. But it seems impossible, even if we could determine its source."

CHAPTER IV

Horrors of the Red Spot

Bablon sat back against the wall in a gloomy mood. Connor, who realized that hopes of their ever returning to earth were questionable, hesitated about raising his spirits with false hopes. Connor rarely dwelt on hopes, but preferred rather to accept life's conditions with as good grace as possible and wait for opportune chances. Nevertheless, his thoughts returned gloomily to his wife, far away on the earth, whom he might never see again.

Captain Dane would of course eventually find that a charred ashy cable, whose severed end marked the erstwhile presence of the observation sphere, had been drawn back on the drums in the *Trisonia's* hull. From the simple deduction that the red ray had caused the disintegration of the metal, he would never venture the *Trisonia* down in an attempt at rescue. In fact, Connor rather hoped that Dane wouldn't be so foolhardy. If the great space-ship blundered down through the clouds to find suddenly that her metal parts had crumbled to nothingness, a catastrophic wreck could not be averted, and her entire body of passengers would be marooned hopelessly and indefinitely in this crimson-hued, cloud-ceilinged country under the red spot of Jupiter.

Time passed with eternal slowness. The terrestrials feared to venture from their sphere, and it was only with the utmost caution that they slipped out from its protection for the food brought regularly by the tetrahedron creatures, or to kneel at the water's edge to slake their thirst. The tetrahedron brought food three times. Twice Bablon sought to gain more information from the creature, but his replies were so vague as to be enigmatical. After what might have been a day or several days' lapse of time as measured by earth chronology, there came a surge of tetrahedrons into the cell-like chamber, and once more the sphere was shoved down into the water and through the devious corridors leading from the main dwelling to the streets of the tetrahedron city. A vast conclave had gathered in the streets, eagerly awaiting the appearance of the captives.

Overhead, the sky was lowering and downcast. An electrical suggestion of impending storm hung omnipresent in the frowning clouds which tumbled uneasily about, a turmoil illuminated by the crimson pillar of light in the near horizon. The sphere was pushed through the crowded streets of the city and down a waterway which left the city behind, yet the Tatrons

surged about and came following in a teeming, threshing herd. It was evident that excitement was looming. The terrestrials sensed that the excitement had to do with their predicament, and looked forward apprehensively to the coming ordeal in which they would meet the Children of the Ray in the unpromising rôle of wayward spirits ventured from the mist-country above.

Vague sparklings of lightning jags appeared in the clouds above, giving a weird flickering illumination to the struggling mass of tetrahedrons. Connor searched the clouds, rather expecting to see the broad hulk of the *Trisonia* jutting down, yet he hoped that it would not, that Captain Dane would take warning from the charred cable which had been drawn back overhead.

After winding down a devious waterway from the metropolis, their sphere was pushed out again upon the inland sea. It seemed phosphorescent, alive and glowing with deep inner light, and far out in its center shot up the crimson pillar of fiery red at whose base jutted a rocky island of great black crags. It seemed almost as if the island were the maw of some leviathan monster of the deep, rearing his snout to spout fire up into the heavens.

With the entire population of the tetrahedron city swimming in its wake, the sphere pushed forward, the island loomed larger and rockier as the distance decreased. Despite the protection of the sphere, the terrestrials were awed by the weird spectacle of the fiery ray of light shooting up into the cloudy ceiling, of the weird creatures in their wake. They noted with growing alarm that the interior of the sphere was becoming hot and stifling.

"The water is almost boiling!" cried Professor Bablon in alarm. "I thought so. There's every indication of hot chemical springs on that island."

● As the sphere increased in warmth, their excitement heightened. If they were forced to leave the protection of the sphere, they would be helpless against these creatures, as well as the unknown Grach-people who lay ahead of them.

"My God! I'm cookin'!" cried Lieutenant Connor, drawing his feet up from the floor of the sphere and perching them on the edge of his seat. Professor Bablon did likewise. He wiped the beads of perspiration from his features and stared ahead. Rough serrated cliff walls of blue flinty rock walled in the island. The sphere was shoved along the base of the precipitous wall to a great canyon opening into the interior. A broad murky river flowed down from the canyon, scabby with bubble-scum and steaming with heat. It disappeared around a turn of the great black canyon walls ahead. Without hesitation, the tetrahedrons pushed the sphere up the great turgid river.

Lieutenant Connor was sweating bucketfuls. Heat was reddening his skin and cooking his flesh. He thought he could not stand it another instant. An eternity of time seemed to pass as they shoved up that great steaming river, filthy with scum and emanating intense heat.

"The things must be immune to heat, professor!" he gasped, stripping his shirt and jerking open the air valve which let the atmosphere circulate rapidly into the sphere.

"Not quite!" wheezed Bablon. "They're squirming. I imagine it must be a part of a religious duty for them to endure the heat. This is their island of the gods, remember."

It was true. Even the tetrahedrons were squirming and writhing with silent pain. Their mecca was ahead of them. Overhead shot the great white-hot ray. They clung in masses to the canyon walls to absorb some of its cooling temperature. But they bore it without murmur, for was it not a manifestation of their gods?

After an interminable period in which Lieutenant Connor seemed to be cooked to a rare turn, the precipitous walls to either side of the river suddenly fell away and they could see a gap ahead through which the crimson pillar was visible, blinding in its intensity. The canyon walls fell away to rocky shelves upon either side of the river, and they could see a central lake

within the pillar of light, which was bubbling and boiling, sending great splashes of steam high into the air. The sphere was being shoved close to a rocky shelf upon one side of the river's mouth.

"God, man!" cried out Connor in agony. "I can't stand this any longer. When the sphere grounds, let's open the door and jump. Maybe we can out-run these creatures."

Professor Bablon nodded mutely. Huge drops of sweat were blinding his eyes and he was gasping weakly for breath. They couldn't stand it much longer.

As the tetrahedrons pushed the sphere upon the shelf, Connor leaped upon the painfully hot bottom of the sphere which burned even through his shoes and seized the door handle. It burned his hand terribly, but he threw it open. Then he leaped, landed upon a rocky shelf littered with bleached bones and shells, and a moment later Professor Bablon was at his side, staggering under the tremendous gravity of Jupiter.

The pillar of light which shot up before their eyes was blinding. Behind them the tetrahedrons were crawling weakly upon the beach, and the two earth-men ran staggering down the long expanse which sloped up to a great natural rampway climbing the precipitous heights of the perpendicular lake-walls. Far overhead they heard the distant rumble of thunder. Jagged lightning jabs flickered, changing the hue of the brilliance of the pillar of light. It was obvious that a tremendous upheaval of nature was gathering.

"I'm done!" cried Professor Bablon, stumbling but catching himself. He stopped, wheezing for breath hollowly. Lieutenant Connor cast a backward glance. The tetrahedrons, with their huge triangular heads upheld by long stem-like necks, were crawling in a slow living surge after them, the padded feet of the base toad-like bodies urging them forward with all possible haste.

"Not at all!" cried Connor. "Buck up! They can't catch us! Come on." He grabbed the shoulders of the elderly man, and half-supporting him, staggered up the great natural rampway which appeared to be the only way to retreat from the tetrahedrons.

CHAPTER V

Rescue from Above

● Behind them, coming with painfully slow patience, crawled the tetrahedron people, their sluggish eyes fixed intensively upon the fugitives. Connor's chest was a mass of aching nerves; his eyes were smarting and blurred, yet he staggered on with Bablon for what seemed an eternity, weighed down by the great gravity. The slope went up and around, with the perpendicular lake-wall dropping at one side into the blinding light-pillar, ascending to the knoll which lifted its great head against the pillar of illumination. Connor thought they had breasted the heights, and as they staggered over the knoll, he let out an ejaculation of dismay.

Before them was the highest elevation of the island. Beyond was a series of gray rocky mounds which surged down toward the outer island shores. A great rocky shelf jutted out over the pillar of light which shot up from below.

And upon the heights of this jutting shelf were countless leaping gyrating figures, strangely anthropomorphic, yet possessed of insect-like bodies segmented and covered with gleaming black crustaceous crusts. This was the Grach-people; that was certain. They were absorbed in a mad whirling dance and did not seem to have noticed the terrestrials in their frenzy. Connor cast about quickly for a hiding place, since they were spent, and he led the choking scientist over into a crumbled crevice which split across an up-thrusting ridge of rock. He fell into the dark opening and hissed for his companion to be silent.

For long they lay there in hiding, panting horribly. It seemed to them that they could not have escaped being seen, but as yet there was no pursuit.

"We can't stay here!" cried Connor. "Those tetrahedrons—they'll be upon us, will find us sooner or later. We'll have to make a break for it."

Bablon merely gasped and shook his head in mournful acquiescence. There appeared to be no escape. Even were they to escape these creatures by some fortuity, there would be the heated lake to cross again. It seemed hopeless. Connor peeped over the edge of the crevice. Bablon followed his example. Beyond the dark ledge with its gyrating figures shot up the huge mysterious pillar of light.

"Look here, man!" gasped Professor Bablon in sudden astonishment. "I've got it! The explanation of the ray! Why, it's simple. Jupiter's interior is as yet molten —do you see? Well, this water body descends down to the hot core. There's some gigantic chemical action taking place down there, generating molten heat and giving off light. This upper water merely acts as a lens for the light emanated from the molten core of the planet."

It sounded plausible. Chemical springs were common on earth, but not of such huge proportions. The molten interior cast up an intense ray, which penetrated through the waters and up into the air. Inasmuch as the steam of the chemical springs constantly generated huge mantling clouds overhead, the ray was diffused into a huge reddish splotch of clouds. Visualized from the earth, it had been an anomaly. Yet its explanation was really simple.

The strange property of swiftly oxidizing metals must have been caused by some unknown chemical reaction in the core of Jupiter itself.

As the terrestrials watched, the first of the tetrahedrons began to crawl up to the shelf. The leaping Grach-people sighted them and opened a way. A fanatical frenzy seemed to possess the tetrahedrons. They threw themselves prone before the Children of the Ray and the older ones detached themselves from the front and crawled over to peer down into the steaming bubbling cauldron of the huge mineral spring.

Some of them appeared blinded by the intensity of the light and fell sprawling from the precipitate edge over the brink. Others hurled themselves over deliberately.

"A fanatical urge for religious sacrifice!" said Professor Bablon. "It is simple in its essence. Savages all the world and planet systems over are urged similarly. Upon primordial earth death-sacrifices were common. Apparently, the tetrahedrons, like the early earth-people, consider heat, which is an inexplicable phenomena to them, as being the origin of life. Indian races of the earth have the same idea incorporated in their Sun-worship."

"But the Grach-people!" cried Connor. "They seem dull and unintelligent people. What possible connection can they have with the religion of Tatra?"

"I can think of none," said Professor Bablon, "except that they are insectivorous. Perhaps they await the dead cooked bodies of the tetrahedrons to be washed up on the shores so that they can eat them. Perhaps they too worship heat blindly."

● Bablon's face turned and became frozen with horror. From directly behind them, a huge tetrahedron-shaped head had arisen upon a slim neck. The great rose-petal lips peeled back and it jabbed downward. Bablon screamed, warding off the blow with a futile gesture of his elbow. The Tatron had crept upon them unawares.

Luckily, the tetrahedron miscalculated his strike and vented his fury upon an outjutting of the rocky crevice, merely tearing the sleeve from Bablon's arm and leaving a bloody scratch. Connor whirled, struck once at the great sluggish eye which blinked painfully under the blow, and then the two terrestrials were scrambling out of the crevice.

A glance about sufficed to fill them with horror. The tetrahedrons had formed a wide moon-shaped army which was sweeping up to the ledge. Escape was impossible. A living stream of sluggish malevolent creatures, they came on slowly, forcing the terrestrials to retreat from their crevice down toward the dancing Grach-people. The insect-like things, standing on segmented legs, seemed rather

affrighted at the approach of the terrestrials, and retreated before them. They appeared to have but little intelligence, probably greatly over-rated by the superstitious tetrahedrons.

Advancing in ahead of the tetrahedrons was a huge figure which the terrestrials recognized. It was Tharg, king of the tetrahedrons.

"Hemmed in!" gasped Bablon. "We can't escape now!"

The sluggish eyes of Tharg fixed upon him intently; Connor became aware that it was speaking telepathically.

"The Grach-people refuse to know you!" cried Tharg.

"Yes," fended Professor Bablon desperately. "We are not of the spirit-people of the Grach."

Tharg appeared to absorb this.

"But neither are you the spirit people of the Tatrons who dwell in the living fires beneath the earth. Therefore you must die in the name of Tatra, God of Heat and Creation, the beginning and the end. It is the same. You must descend to him."

"You mean down into that hell-hole?" cried Bablon.

For answer, the king advanced menacingly, while his minions followed closely.

"We've got to make a fight!" cried Connor. "Attract his attention. I'm going to make a dash for him. We'll take him with us, anyhow."

Professor Bablon nodded. His hand was trembling, but he too knew how to die. From far overhead came the distant rumbling of thunder. Vivid lightning jags preceded the impending storm: a fitting scene for a sacrifice.

Suddenly, there was a burst of swift staccato reports crackling and popping from the upper air. The Tatrons paused and their great eyes stared upward. Then they winced in supernatural awe. Tharg too had hesitated. He cowered back in fear.

Connor looked up. The end of some sort of dangling line was swinging high in the air, close to the uprising pillar of light. Majestically it swept across the sky, a streamer of tiny sparks flashing toward the pillar of light in its trail.

"The *Trisonia!*" shouted Professor Bablon in astonishment. "They're dangling a rope through the cloud barrier from above!"

● Connor stared. The great line had swung slowly about and was lowering, swinging across and toward them. Somewhere above, Captain Dane was fishing at random for the terrestrials he dared not descend to rescue.

"Catch the rope!" yelled Connor. "Grab it!"

He sprang forward. Tharg also leaped, opening his great head in a lightning jab for Connor. But Professor Bablon had stiffened, and seemed to go suddenly mad.

"Connor!" he shouted. "Leave it go! Drop, you fool! Drop! Can't you see? Those clouds above are about to break—they're loaded with static electricity and this point on the island is loaded with an opposite charge. That line will short-circuit millions of volts! Connor!"

Professor Bablon flung his body forward and grasped the lieutenant in his arms, tripping him. They fell in a writhing heap. Tharg was staring at the dangling thing reaching down from the sky. Into his brain came the thought that indeed these creatures were spirit-people of the Grach, and that their own kind were rescuing them.

Connor fell blindly, cursing. Professor Bablon's long arms holding him down. He felt that they were lost, that Tharg and his hideous subjects would fall upon them and mangle them to death.

Then a blinding flash of white heat rent the air—followed by a tremendous detonation. Connor was blinded, but his eyes had caught an instantaneous picture of a great lightning jab leaping down the dangling line. Tremendous static-electricity raced down to the highest point of contact, and that happened to be King Tharg. Following the titanic rumble of thunder—the storm broke.

Connor was numb and stunned. His

(Continued on page 915)

(Illustration by Winter)

And as I gazed, transfixed with horror, Rawlins was jerked from the ground. Steadfast and I fired together.

MARTIAN MADNESS

By P. E. CLEATOR

● We sometimes wonder what the real Martian creatures (providing there are such) would think if they knew of the hundreds of various forms science fiction authors have pictured them in. Although those pictured in this story are utterly fantastic, they are far from impossible. With certain favorable conditions, such monstrosities could easily evolve on the earth.

Here is a space trip taken in secrecy. Many great men prefer to work this way. Perhaps there is some one even now on the verge of a great discovery—a discovery so great that the science fiction fan will smile ironically at the unbelieving public when six-inch headlines cover the first page of every newspaper, announcing the success of some scientist that will change the entire course of existence. No one can say.

There is a touch of H. G. Wells in this gem by our English author.

● The Swallow Inn is one of those old world places which somehow contrive to continue to exist despite the fever of modernization which has the country in its grip. Its location is similar to others of its kind—in the heart of the country, with a maze of by-lanes the only approach.

Those who succeed in penetrating its protective network of secondary roadways, in order to experience the delights of its sequestered hospitality, usually do so only on the recommendation of others who have been there before them. Chance visitors are the exception far more than the rule.

So, when George, as the proprietor was familiarly known to his regular patrons, observed at dusk one June evening the approach of three strangers on foot, he was not a little curious.

From his vantage point on the long balcony which skirts one side of the dining room on the first floor, he studied them carefully. It was most probable that the Inn was their destination, he reflected, for where else would they be going? And they were most certainly strangers—his regular guests invariably reserved rooms beforehand.

However, if they desired a night's rest, he would, as it happened, be able to accommodate them, for only a few hours ago he had received a letter advising him that a large party of guests due that day would not arrive until the morrow.

As soon as he was sure that they were definitely headed for the inn, he hurried down to greet the unexpected arrivals.

"Good evening, gentlemen."

"Good evening." And the tallest of the trio, acting as spokesman, continued, "Our car is stranded in a ditch about a mile down the lane. Can we obtain supper, bed, and breakfast here? And will it be possible to obtain help to haul the car out in the morning?"

To the satisfaction of all concerned, George answered affirmatively to both questions. Sleeping accommodation was available. And if they would care to wash, supper would be served by the time their ablutions were complete. As for the car, it would be a simple matter to obtain the loan of a couple of horses in the morning. And so it was arranged.

A little later, the three were seated before a generous repast in the dining room.

"I must say," remarked Hanson, towards the end of the meal, "that matters might have been much worse. I almost feel inclined to thank that confounded horse, Markham, which caused you to ditch the car."

Markham nodded. "It was the only thing to do; otherwise we should have hit

it. And apart from that burst tire, I don't think there's much damage done. All the same, I still maintain that it was all Stanton's fault."

"What a nerve!" replied Stanton, admiringly. "I put myself to the inconvenience of directing you along a short cut—"

"And get hopelessly lost—"

"And you persist in flying around blind corners as fast as you can go—"

"Trying to make up for lost time—"

"With the result that you nearly ride over a perfectly harmless horse having a solitary ramble. And I am to blame!"

"If it hadn't have been for your alleged short cut—"

"For goodness' sake, shut up," interrupted Hanson. "Why go over that potty argument again? Both the short cut and the horse have resulted in our coming here. Personally, I wouldn't have missed it for worlds. And," continued Hanson, rising as he spoke, "if that door over there leads to the balcony we saw as we entered the place, I'm going for a quiet smoke. See you later."

● It was dark on the balcony, but by the light of the match with which he lit his pipe, Hanson observed a rustic bench in an obscure corner. He picked his way towards it, and stretched out comfortably.

The night was perfect. The air, though pleasantly warm, was refreshingly cool compared with the excessive heat of the day. The sky was a picture. Thousands of stars—faraway suns, some of them surrounded, perhaps, by a progeny of planets—gleamed clearly in the blue-black sky. Mars, too, was to be seen, a red dot, seemingly poised in space, but in reality hurtling through the vacuous void at a tremendous velocity.

Hanson's pipe burned hot, and he regretfully withdrew the stem from his mouth, tapped out the glowing remnants, and then rose to rejoin his companions.

It was not until he was again seated at the table that he noticed the stranger. The man stood at the far end of the room, before one of the windows, staring fixedly into the night. Hanson cast a glance of enquiry in his direction.

"He came in just after you left us," offered Markham, in answer to his unspoken query.

"The fellow seems queer to me," added Stanton. "He has hardly moved since he entered."

Hanson eyed the stranger again with renewed interest. Yes; he certainly looked a little strange. His general appearance was odd, for one thing. And his features, though but dimly illuminated by the light of the single oil lamp that stood on the table, seemed mutilated, as though the owner had met with some terrible accident.

But the subject of their conversation, if he heard their remarks, paid not the slightest heed. He merely continued to gaze out of the window, staring straight before him with an almost vacant look.

"I wonder what he's staring at?" whispered Markham.

"The moon," suggested Hanson, "Or"—remembering his recent scrutiny of the heavens, "Mars, perhaps. It can be seen quite—"

"Look at him!" breathed Stanton. Hanson glanced round. At the word "Mars," the stranger had turned towards them, and was staring intently in their direction. For a moment, he seemed about to speak, but evidently thought better of it, for he finally resumed his vigil.

Hanson tapped his head significantly, and whispered, "Loco!"

"Speaking of *Mars*," said Markham deliberately, "I was reading an account the other day of the possibilities of reaching it. The writer held that it was sure to come about before long. Personally, I think that any one who believes in such rot is a little mad. For instance, how the—"

"Look at the fellow now!" hissed Stanton.

The stranger had vacated his original position, and was advancing towards them with a slow and almost stealthy tread.

From their position of vantage, for he

was now fully in the light of the lamp, they were able to study the man carefully as he slowly advanced. And it was his face that immediately attracted and held their attention. It was a sickening sight. His features were one mass of frightful weals, punctuated by peculiar red, circular indentations. And the terrible marks, they now observed, extended right over the top of his head, exposing bare channels through the long white locks that were his hair.

When the stranger spoke, however, his speech belied his wild looks. In cultured tones, that seemed oddly reproachful, he addressed himself to Markham.

"So *you* think that I am mad, too?" And then, a little bitterly, he murmured softly, as though speaking to himself, "Just like the others! Yes; just like the others!"

His gaze wandered, first to Stanton, and then to Hanson, and he continued, almost fiercely:

"But I *did* go! I swear I did!"

"Of course you did!" soothed Hanson. "Won't you sit down and tell us about it?"

The grateful look that suffused his maimed features was pitiful to behold.

"Do you really mean that?"

"Of course we do," assured Hanson, speaking for the others, to whom he flashed a warning glance.

A little uncertainly, the stranger sat down in the nearest chair. And after lighting a delapidated cigar which he produced loose from a pocket, he said, calmly enough:

"It is evident that you did not hear of our flight. Very few did. Our friends said that it was impossible, and that we were mad. But they could not dissuade us. We were determined to go."

CHAPTER II

Off to Mars

Rawlins designed the ship—he was a genius, as was Steadfast, who had invented the fuel. And I—I was just an archæologist. But when I heard of their plans, I simply had to accompany them. Such an opportunity might never have occurred again.

At first, they would not hear of it. "You are married," they objected, "and we are not." But in the end, I had my way.

"Don't go! Oh, don't go!" my wife cried in agony.

[For a moment, the stranger paused, as though tortured by memories of the past. And when he continued, his voice was low and sad.]

I loved her. But for the cause of science, I forced her from me. It was the last time I saw her alive. May God forgive me! The suspense—the waiting—the awful uncertainty of it all —it broke her heart.

[There was an awkward silence. The listeners, though not quite sure what he was talking about, did not have the heart to interrupt.]

It was about this time, on a night such as this, that we started off. Previously, I had timidly suggested making the moon our goal. The comparative nearness of the earth's satellite would, I thought, ensure better prospects of success. But Rawlins and Steadfast would not hear of it.

"What's on the moon?" they asked. "And there's no air, which would make landing extremely difficult. Moreover, the extremes of temperature which follow in the wake of the Lunar two weeks' 'day' and 'night' would be unbearable. No; it's Mars, or nothing."

No one witnessed our departure. My companions were sick of the derision to which they had been subjected. Soon enough to seek publicity, they said, when we returned.

Picture the scene, if you can. A shining, cigar-shaped space-ship, nestled at the foot of a steel slipway. Protruding rocket tubes, gleaming in the moonlight, at its bow and stern. And inside, lying strapped in hammocks, three puny humans anxiously awaited the moment to pull the lever which might transform their creation into a living tomb.

I wanted to cry for them to stop before it was too late. It was with an effort that

I prevented myself from rushing out into the security of the night.

Then, suddenly, some one shouted a warning. The next moment we were off! Amidst a blinding flash of flame from the stern tubes, accompanied by a deafening roar, we shot skywards.

The effects of the rapid acceleration pinned me to the hammock, which groaned and stretched under the terrible strain. My limbs felt heavier than lead. I could not move. My breathing became labored. I tried to scream that I was choking—that I could bear no more. But instead of lessening, the awful pressure increased, until I mercifully slipped into oblivion.

When I regained my senses, it was to find Steadfast bending anxiously over me. The pressure had appreciably diminished, and the thunder of the rocket tubes had dwindled to a muffled roar.

"Cheer up," he said, "we've made it."

"Made it—made what?" I muttered feebly.

"Why," he laughed, "open space. And our speed has now reached over three thousand—no, three *hundred* thousand miles an hour! The tricky part was maneuvering through the earth's atmosphere without causing the ship to become red hot through friction, and then accelerating to seven miles a second—the speed necessary to overcome the earth's gravity. It was during the period of excessive acceleration that you lost consciousness. And you were the lucky one. It was hell! We're still increasing speed, though much more slowly. Thought we'd give you a chance to recover."

I thanked them ironically.

"Can you manage to reach that porthole?" Steadfast asked me.

● I nodded, and painfully unbuckling the straps which held me, slid to the floor. Then, aided by Steadfast, I crawled to the quartz window. It was a sight I shall never forget. We were wrapt in the eternal blackness of depthless space, surrounded by countless bright, unwinking stars. But it was Mother Earth that interested me most. There she hung, not behind us, as I had expected, but to one side. In the faint reflected light of the moon, she looked dim and unreal. And as I watched, spellbound, and not a little homesick, she revolved majestically around. Gentlemen, I am the only living person who has seen that sight!

* * *

The stranger paused to relight the stump of his cigar, which had gone out unnoticed during his recital. Markham coughed as a cloud of rank smoke assailed his nostrils. Stanton eased himself in his chair, and winked at Hanson, who frowned in return.

The thoughts of the three were practically identical. The poor fellow was demented, of course. The terrible accident which had disfigured him had probably turned his brain. A trip to Mars! The idea was incredible and fantastic. And yet each had to admit that he seemed sure of his facts. Indeed, so convincing was his manner they felt they almost *wanted* to believe him!

The stranger exhaled another cloud of smoke, and then continued:

* * *

I will not dwell on the horrors of that voyage. After our initial excitement and wonder had died down, the unrelieved monotony, the unbearable silence, and the unnatural conditions of our existence all but drove us insane.

● Our idle minds conjured up all sorts of unpleasant possibilities. Suppose our oxygen supplies proved inadequate? What if the tubes burnt out and left us to drift through space until we starved or suffocated? Or perhaps a meteor would annihilate us! Were we on our right course, and maintaining the correct speed?

Yes; death lurked very near. We prayed that our luck would last.

Steadfast spent hours checking and rechecking his calculations. Sometimes he would call for more speed. Occasionally he would order the motors to be shut off altogether. And those were terrible times, for we immediately lost all sense of weight, and a horrible and frightening sensation of

falling into a bottomless abyss prevailed. The slightest movement sufficed to send us flying about the ship. At times we would find ourselves suspended in the centre of the cabin. "Up" and "down" no longer had the slightest meaning.

But somehow we continued to survive. And the sight of our destination, appearing larger every time that we gazed longingly upon it, heartened us tremendously. Then finally, when we were able to distinguish Phobos and Deimos, the two moons of Mars, with the naked eye, we knew that the worst was over.

Our course lay ahead of the planet. Would we be in time to intercept it in its headlong flight around the sun? Whether or not, it was imperative to reduce our velocity. The stern tubes were shut off, and those in the bow burst into life, thus checking our headlong flight.

The hours of suspense which followed were awful. It was not until we felt ourselves in the grip of Mars' gravity that we knew that the danger of overshooting our mark was past. But the problem of effecting a safe landing still remained to be overcome.

The descent to the surface was a nightmare. It seemed as though nothing could avert a horrible crash. I was certain that we were hurtling to destruction. But once again, luck favored us. After barely skimming the surface of a red, sandy desert for a distance of twenty miles or so, we finally hit the surface, and after ploughing a wide furrow for over a mile, the ship came to rest.

For a time, we were too ill to do anything. The gravitation, though much less than that to which we had been accustomed on earth, affected us strangely. And the effects of the rapid deceleration were extremely nauseating.

CHAPTER III

Exploration

● Rawlins, whose last act had been to shut off the tubes at the moment of impact, was the first to make a move. Struggling out of his hammock, he unearthed—or should I say unmarsed?—some whiskey and soda, and administered a celebrative tonic. By the time we were more or less our normal selves, it was dusk. So after eating the most comfortable meal we had had since the commencement of the flight, we settled down for the night.

It would take too long to describe the happenings of the next two days. It will be sufficient if I mention that Steadfast analyzed the atmosphere and pronounced it breathable. But the pressure was fearfully low. Nevertheless, we ventured out. As Rawlins said, it was one of the risks we had to take. And he, for one, had not journeyed thirty million miles just to gaze at a landscape from the confines of the ship—a sentiment which both Steadfast and I heartily endorsed.

But we soon tired of walking around. In spite of the light gravity, the slightest expenditure of energy left us gasping like fish out of water. Nor was there much point in attempting to investigate the vicinity of the ship. There was simply nothing but the red desert. It stretched as far as the eye could see. It was a lifeless waste. So after planting a union jack to mark the spot on which we had landed, we headed the ship towards one of the poles. For it was in that direction, if any, that we should find life. There was ice there, and life must have water.

For the remainder of that day, and all the next, the ship ploughed through the burning sand, until, late in the evening, we found our way blocked by a range of cliffs, rising sheer out of the desert.

The next morning, over breakfast, Rawlins indicated the rocky mass ahead of us. "Suppose we examine it?" he suggested. "Even though we find nothing of interest, the exploration will provide a certain amount of exercise."

Our preparations were soon completed. We wore little, and carried but the barest of necessities. A revolver and twenty rounds of ammunition apiece, food and drink, was about all.

It took us half an hour to reach the base

of the cliffs, in spite of their nearness. The going was fearfully slow, and rest spells were frequent. And of life, in any shape or form, there was not a sign.

"I shouldn't be surprised," said Steadfast, "if Mars turns out to be a dead world. Only the poles appear to possess moisture, and the whole of the planet's atmosphere is slowly leaking away into space. Anyway, if there *is* any life, a few more hundreds of years will see the end of it."

"Surely life has existed here at some time or other," I interposed hopefully. "At least we ought to discover signs of it."

We were slowly picking our way through a tangled mass of crumbling boulders—huge pieces which had fallen from the cliffs, when Steadfast, who was in the lead, suddenly gave a shout, and quickened his pace.

His cry of "A path! A path!" brought us running breathlessly to him.

"You're right," gulped Rawlins in an awed voice. Without a word, I kneeled down, and brushed away a layer of sand that partly hid the path, to expose a rock surface which was *not* red sandstone. It was quite obvious that it was not Nature's handiwork. The stone had been cut into blocks, which were joined together by some sort of cement.

"Well, Mr. Expert," said Steadfast to me, "tell us all about it. Its age, who built it, and its purpose."

"The obvious thing to do," I said, ignoring his sarcasm, "is to follow it up. Let's go."

● To the left it ran straight into the desert, to be swallowed up beneath the sands. So we bore right. From all appearances, it had been untrodden for many years, perhaps even hundreds of years. We were now headed straight for the cliffs. Where could it lead? Would there be steps, or just a blank wall?

As it happened there was neither. For the next moment, we saw the entrance to a tunnel, cut into the solid rock.

"Look!" I whispered. "It's less than four feet high!" The significance of this was immediately apparent. The stature of the Martians who built it could not have been over three feet in height—a fact quite in keeping with the smaller mass and gravity of Mars.

"Do we go ahead?" enquired Steadfast.

"We haven't brought torches," objected Rawlins. While we were talking, I stooped down impatiently, and entered the tunnel mouth.

"It's all right. I can see a glimmer of light at the far end, though it's a long way ahead," I called back excitedly.

That settled the question, and like three hunchbacks, we stumbled along. I was in the lead, and my thoughts raced far quicker than my dragging feet could carry me. What, oh what, were we on the verge of discovering? In an agony of suspense, I crept along as fast as I could. Now and then a muttered imprecation echoed from behind me as either Steadfast or Rawlins bumped his head on the low, though fortunately smooth, roof. Perspiration soaked my thin garments, and the prolonged effort was beginning to tell upon all three of us. When we finally emerged into daylight, we were gasping our last, and after tottering for a few yards, we collapsed to the ground.

It was some little time before we were sufficiently recovered to sit up and take notice. Steadfast was the first to move, and his cry of amazement brought us back to life. We were in an immense crater-like hollow. The high cliff walls curved round on either side of us and met in the distance, about three miles away. From evidence which I gained a short time later, I am confident that the gigantic pit in which we found ourselves had been artificially made. Apparently, the Martians, for reasons best known to themselves, had chosen this huge mass of rock, rising sheer out of the desert, as a site for a city. But instead of building on top of it, they had scooped out a hollow core, probably fashioned their buildings out of the solid rock as they worked.

But of these buildings, practically nothing remained. With the passing of time,

the structures had crumbled to sand, and the few pitiful remains which greeted us provided little evidence of their former glory. The place was as quiet as a tomb. If it had not been for the circling walls of the cliffs, and the few broken arches and pillars which protruded from the engulfing sand, we might have been in the desert itself.

Such a scene of lifeless desolation disappointed us keenly. It was as much as I could do to prevail upon my companions to stay while I examined a few of the remains.

"The place is as dead as the dodo," said Steadfast disgustedly. "And here I am carrying this confounded gun along, expecting violent opposition."

"We're just a little late," moaned Rawlins. "—just a few thousand years or so!"

"Come on," I said impatiently. "Who knows what these ruins may reveal? Why, it's the find of the century!"

We wandered around for hours. I lost all count of time. Dozens of unanswerable questions passed through my mind. Who were the builders of this city? What had they been like? Why was the place in ruins? Why hadn't they constructed their buildings of the more permanent stone with which they had made the pathway of the tunnel? Had they been wiped out, or had they migrated elsewhere?

My meditations were interrupted by Steadfast. "For goodness' sake," he said, "let's sit down for a rest and some food. Then it will be time to return to the ship."

"Try to stop me!" supported Rawlins, and in the face of such opposition, I had perforce to give way. I consoled myself with the reflection that I, alone, could do practically nothing. It would require months of intensive labor to excavate the ruins thoroughly. Perhaps, later, it would be possible to fit out a careful expedition, form a permanent camp here, and do the job properly.

It was near the end of our meal when Rawlins said, in an excited whisper, "Who said this place was dead? There's a balloon!"

CHAPTER IV

Life on Mars!

● We jumped to our feet and swung around. "And there are two more!" cried Steadfast. He was right. There were certainly three of them. And they were slowly drifting towards us. We studied them carefully as they approached.

"If they are balloons," said Steadfast doubtfully, "where are the occupants?"

For we were now able to observe that there was not the slightest sign of a basket or similar container. The mysterious objects drifted still nearer. I gazed at them intently. They were certainly globular in shape, though of different diameters, and a number of rope-like things dangled from the underside. But there was definitely no basket. Then suddenly I perceived the truth.

"The things are *alive!*" I cried. "And they are large enough to be dangerous!"

"I believe you're right," replied Steadfast in a hushed voice.

Rawlins glanced behind us in the direction of the tunnel mouth.

"Great Scott!" he exclaimed, "We are surrounded!"

And such was the case. Unnoticed, a dozen or more of the creatures had silently drifted behind us. Our escape was cut off!

Steadfast laughed shakily. "Perhaps they're harmless," he said hopefully.

I glanced around apprehensively. The air was thick with the things. Instead of a dozen, there were now three times that number.

"I don't believe it," I gasped. "Those rope-like things are tentacles."

Rawlins paled. "Blood suckers!" he breathed.

"Not just blood," I replied, "but *moisture*. They've scented it. That it happens to be our blood is immaterial—to them!"

"Fire at them!" yelled Rawlins. And raising his pistol, he sent a bullet crashing through the nearest of the monsters.

● The result was startling. For not only did the thing burst, as was to be expected, but thousands of small round

things flew in all directions, like shrapnel. A hundred or so fell almost at our feet. We gazed at them curiously. Before our eyes, they seemed to grow. One, in particular, which had landed on a spot where one of us had spilt some coffee, increased in size at an alarming rate. In less than no time, it had swelled to the size of a football. It bobbed uncertainly, and then rose a few inches from the ground. And a mass of tiny rope-like things hung from its underside!

I laughed crazily, and yelled a warning. "Don't you see—they're seeds—eggs—and they're growing."

Then Steadfast did a strange thing. He grabbed up the paper bag which had contained his lunch, struck a match, and after setting a light to the paper, flung the improvised torch at the nearest of the creatures.

The result amazed both Rawlins and myself. There was a blinding flash and a deafening explosion. A tongue of blue flame shot skywards.

"I thought so," snapped Steadfast. "These damn things contain hydrogen—it makes them float. They must split up moisture into its elements, consuming or eliminating the oxygen, and storing the hydrogen."

Two more of the creatures burst into flames as Rawlins and myself followed Steadfast's example, and hurled a lighted torch.

"See," continued Steadfast, "the flame destroys the young as well as the parent. But we've no more material with which to make torches."

I glanced around desperately. The ruins offered not the slightest protection. Those tentacles would be able to reach anywhere we endeavored to hide. If only the buildings had been in a better state of preservation!

"We'll have to run for it." I shouted. "It's our only chance."

I set the example by charging in the direction of the tunnel, firing as I ran. With sinking feelings, I noted that we were at least half a mile from our destination. The position would have been bad enough on a hard surface and with a sufficiency of air. But charging through loose sand and jumbled ruins, with lungs that cried out for the want of oxygen, made our plight far worse.

Shots sounded behind me, as my companions followed in the dash for safety. The range was so close that it was impossible to miss. Every shot scored a hit. And with the disruption of each monster, showers of the tiny offspring rained upon us.

As I had feared, we were soon forced to call a halt. The pace was altogther too furious to last. And our guns required reloading.

"This—rarefied—atmosphere," gulped Steadfast, as he rammed fresh shells into his gun, "We've got no chance!"

As he finished speaking, I heard Rawlins scream. I whirled around. One of the monstrosities had swooped low and flung a tentacle around his waist. Another curled towards his neck. And as I gazed, transfixed with horror, he was jerked off the ground.

Steadfast and I fired together, and then ducked to avoid the living rain which immediately descended upon us. Rawlins landed unhurt, and we staggered on.

It was then that I noticed that Steadfast was covered with dozens of those living missiles. They clung like leeches all over his body, and tiny streams of blood marked the spot of a hundred punctures.

* * *

● The stranger stopped. He was trembling like a leaf, and his eyes blazed with an insane glare. With a shout he jumped to his feet, sending his chair crashing to the floor. Then, he made a sudden leap to the nearest wall, and crouched there.

"Keep them off!" he screamed. "Look! They're everywhere. Help, oh, help me!"

As he shouted, he raised his arms above his head, as though to ward off an impending attack. Then he plucked wildly at imaginary creatures clinging to his arms, body, and legs. It was an awful sight.

Markham arose and approached the ma-

niac, speaking words of assurance. But it was no use.

At that moment, George hurriedly entered the room, followed by two of his staff.

He indicated the gibbering creature with a nod of his head, and said, quite calmly; "Take him to his room, Fred, and let Tom stay with him until he recovers."

Then, moving over to his three guests, he apologized for the disturbance.

"Poor fellow," he said, "I always have to be prepared for him. He is often normal, of course, and the doctors have pronounced him sane, yet look at him now. He is always the same when he starts talking about Mars."

"Is there any truth in his story?"

"It's my opinion that it's all truth. I've heard the story dozens of times, and he always tells it the same. He used to live near here, but when he found his wife dead, he sold his house and came to stay at the inn."

"Did the flight really take place, then?"

"Oh yes. They started off one night in July, about ten years ago, from the grounds of Dr. Steadfast's laboratory. I remember it well. No one expected them to return, but seven weeks later *he* came back.

"The papers gave a short account of his rescue. He was discovered in mid-ocean, in an exhausted condition, floating on a piece of wreckage. I have never learned how he managed to get back—how he was able to pilot the ship alone through space is a mystery.

"As was to have been expected, his terrible experience on Mars, followed by his lonely journey and narrow escape from drowning when he landed in the sea left their mark. But it was when he found that his wife was dead that his brain really turned. And the fact that nobody would believe his story was the last straw.

"I think that I am about the only person who is convinced that it is the truth. Anyway, apart from any other consideration, how can you explain the terrible marks which cover every inch of his body? No scientist has yet been able to point to any earthly agency which could have caused them.

● "However, gentlemen, whether to believe him or not is a matter you must decide for yourselves."

THE END

People Terrified as Big Hill Sinks Deep Into Earth

(From the Milwaukee Journal, November 18, 1933)

Fort Adams, Miss.—(U.P.)—Quicksand is believed responsible for earth movements in Wilkinson county that recently sent a hill, 180 feet high and 150 acres in extent, sinking into a hole so deep that the tops of 80-foot trees were 40 feet below the surface.

According to Frank C. Colifer, real estate man, such movements have occurred several times in the past. Negroes were terrified by the recent sinking and they fled their homes, household goods and growing crops, in terror and left the country.

Colifer said he had seen similar movements on a smaller scale, always when the nearby Mississippi river was at a low stage. The present sinking began on Oct. 8, when the river was unusually low. He said there was undoubtedly a big stratum of water sand, or quicksand, under the ground there. When the river is high, the pressure of river waters, operating on the sand through the banks and by subterranean passages under the banks, holds the quicksand in place.

When the river is low, either the water runs down out of the layer of sand and the level of the sand stratum is lowered, or else both water and sand run down and out into the river.

When the hill began sinking, a nearby hill rose about six feet higher.

(Illustration by Bulow)

Colonel Marsh's elephant gun went off like a thunderclap.

CAVERNS OF HORROR

By LAURENCE MANNING

● Some time has passed since I first told you about the Stranger Club up on West 53rd Street. I have spent part of it in the great lounge listening to stories of one sort or another, but they must wait, for, starting in this room last month, I have been led into as extraordinary an adventure as any I have been told and I must tell it as it befell. Perhaps the telling may help me to forget.

I suppose women are more curious than men about some things. Quiet, reserved men who do not tell all they know, for instance, drive them frantic with curiosity. Many a man owes a pretty wife to the mere fact that she could not find out enough about him any other way than by marrying him. These are not idle remarks, for Smithers (though still single) is just that sort. I saw him once at a charity ball at the Plaza and you could fairly see the feminine fingers twitch to get at him—but then, Smithers seldom attended dances and the word "mystery" was written on the carriage of his body and in the slow amused smile that looked out from his handsome face. But the oddest thing about Smithers is that men feel the mystery as well. At the club, every one treats him with exaggerated familiarity whereas no one knows him really well. He has a curious knack for impersonal friendship. This story is largely about Smithers.

It started at the Stranger Club on a Friday evening. My friend Seeman was back from his latest trip to Africa and I had been licking my lips in anticipation of a good yarn. So far, however, he had only mumbled something in his meek quiet voice about "trouble with the cannibals" up some river or other where he had been piloting an expedition looking for oil. He had admitted that it was "a sort of a war" and that he had had to "pot a few of 'em," also that three of his Basuto porters had "been scragged." That is just exactly like Seeman. To think of him doing things in a heroic way seems absurd. How nature ever managed to crowd his adventurous temperament and brave mind into that dried-up, meek-looking little body of his is a puzzle. Also present at the club that evening was Colonel Marsh, and he and Seeman and I were wandering around the great lounge talking about Africa and examining some of the heads which the Colonel had bagged a year ago and presented to the Club. In particular was the head of a huge white rhinoceros that glared down from the wall on the right of the great fireplace.

Smithers had been reading and drinking whiskey sodas in the library and we had the lounge to ourselves. We had, I suppose, talked loudly enough for Smith-

● **Mr. Manning's "Man Who Awoke" series of stories made such a success last year that we have finally gotten him to continue the adventures of members of the "Stranger Club," which was introduced in "The Call of the Mech-Men," November, 1933. Readers acclaimed this story the best in the issue.**

Colonel Marsh also participates in the present adventure, though in a different rôle than in the Mech-Men story.

Here we are given a narrative slightly out of Mr. Manning's regular style —a story of terrors indescribable. There is a mystery which is not revealed until over half the story is told. All in all, it is a corking yarn. With Laurence Manning as its author, that is a foregone conclusion.

ers to overhear us in the next room. At all events, as we stood admiring the rhino, we became aware that Smithers was beside us. We eyed him silently for a moment. He was staring hard at the head on the wall and finally turned around to face Colonel Marsh with that teasing amused smile on his face. Marsh's pipe-stained mustache bristled and his face grew redder than usual.

"Quite a beast!" said Smithers, with a half-smile.

"Weighed three tons—shook the earth when he charged!" snapped the colonel.

"But I suppose you had a good heavy rifle?"

"My Martinson express—wished it had been a howitzer!"

Smithers raised his eyebrows politely and sauntered off, leaving the worthy colonel sputtering with rage.

"The dam' puppy! I'd like to see *him* face a charging rhino!"

We sympathized warmly, for both Seeman and myself had been puzzled by Smithers' remarks, and Seeman, who ought to know, told Marsh that he rather envied him that head. Almost any one except a fool, I thought, knew that the white rhino was a prize from both the point of view of rarity and risk. Now certainly Smithers was not a fool. I began to wonder even then and curiosity was at the back of my mind during the next hour while we plied the heated colonel with cooling drink and smoothed his ruffled sensibilities in the quiet tap room. Smithers had not actually said anything calculated to insult, but his attitude had suggested sheer scorn, and the colonel fumed long over it. I left Seeman and Colonel Marsh after a while and sauntered into the lounge once more. There, legs braced apart and arms in pockets, stood Smithers in front of the rhino, as though trying to stare down those glassy eyes. I thought to myself that if Colonel Marsh should happen in, there would be a certain explosion and, of course, even as I glanced around at the doorway, there he was—red and bristling!

I shuddered and closed my eyes. When I opened them again, the two were facing each other—the one lean and ironical, the other stout and furious. Smithers put his hand on Marsh's shoulder paternally. "You must come out to my place and have some real shooting sometime!"

"Take your hand away, sir! Dam' puppy! You must be drunk, sir!"

"Never more sober. But what's the matter? Don't you like shooting?"

The colonel boiled over and stamped away in a rage. Smithers turned to us.

"I thought he liked shooting! You two might care to come out, perhaps?"

"Smithers, you *are* drunk! You live in a respectable Long Island suburb—what do you propose to shoot?"

Smithers smiled maddeningly. "I'll bet one thousand dollars against a forty-four dum-dum that I'll give you more game to shoot—and bigger game—than ever was found in Africa!"

From the other side of the room the colonel's snort sounded like a maddened beast. Smithers turned languidly toward him.

"That goes for you as well, Marsh!"

"I ought to take it—just to teach you a lesson—I *will* take it! You and Seeman hear?"

"But Marsh, he's drunk—must be!"

"Drunk or sober, it'll cost him one thousand!"

I shrugged. After all, Smithers was rich enough and certainly deserved it.

"All right—is it a bet, Smithers?"

"Right you are! When shall we say? This week-end?"

Seeman had an engagement, so we made it for the following week. Smithers looked slowly from one to the other of us and his face grew serious.

"Bring elephant guns and explosive shells," he said soberly, "and I'd suggest leather leggings and heavy shooting jackets. I'll expect you Friday evening!"

And he sauntered out of the room, leaving us half-amused and wholly angry at him. Big game shooting on Long Island! Well, we were going to be there (we decided) and we would take the

man's money without the slightest compunction!

"After all, a thousand dollars is worth going for," said Seeman mildly and mixed himself another drink. I puzzled a moment over the incident. If the man had wanted us there *without fail,* he could not have handled the invitation better than he had. But why did he want us? Certainly not for big game, I decided. Then what? Could it be to protect himself from something? Perhaps the man had enemies—unscrupulous ones. Possibly he had fallen foul of gangsters or racketeers in some way, although it was difficult to imagine the aristocratic Smithers mixed up in such matters.

During the following week I became more and more convinced that the invitation was serious. I phoned Seeman who pooh-poohed me out of countenance.

"He'll set us shooting mice or rabbits —that's about it."

"Well . . . . you may be right. Rather humorous to shoot a mouse with an elephant gun, though?"

He laughed. "Good, man! We'll take along the artillery and we'll dress the part, eh? This will tickle the colonel!"

● And so on Friday afternoon we gathered at Marsh's apartment and commenced preparations. We wore leather breeches and leggings and Seeman had heavy knee boots. We provided ourselves with pith helmets and each wore leather bandoliers filled with cartridges. We emptied two pints of the colonel's Bourbon during the dressing, and under such inspiration I insisted we each thrust two revolvers into our belts. When we staggered down to the car with our heavy rifles, we must have made an extraordinary picture. The doorman stared and the Negro elevator boy swallowed his chewing gum at sight of us and almost wrecked the car before we got down to the street level. Out we marched across the sidewalk and into the car, while passers-by stopped and rubbed their eyes unbelievingly at the sight. I drove slowly until we were across the 59th Street bridge and then stepped on the accelerator.

It was late afternoon when we arrived at Paulings, on the north shore of Long Island, and asked a lonely and bored traffic policeman for direction. He gave it as though he wondered what we might want at Smithers. He knew the house well enough; one could tell that. It was close to sunset when we turned up Smithers' drive. His place was rather unusual—a large area of woods through which the drive curved and autumn tints on the trees made it doubly attractive; then a broad sweep of lawn, tree-dotted, with the house set on a knoll and beyond that a small lake in a dell enclosed by tall pines. We just had a glimpse as the day died and then we were at the door and a lean-faced butler took us over from the footman who opened to us. We were led into what must have served Smithers for a library.

"Mr. Smithers is expecting you and will be down directly," said the butler as he left us.

He came within the minute and stood in the doorway, cool and smiling and eyeing our equipment with particular care, it seemed to me. I wondered suddenly how sober he had been at the club a few nights ago, and evidently, the colonel was thinking of the same thing, for he had the grace to blurt out, "We're here for that thousand dollars of yours, Smithers—hope you haven't forgotten!"

"Rather not! But first you must judge of the hunting; afterwards we settle the bet!"

"Oh come, Smithers, what nonsense! Do you still keep up the pretense of big game here on Long Island?"

Smithers gave him a quizzical look. "We eat first—hunt at night," said he. "Would you like to wash up?"

All through dinner, Colonel Marsh and I endeavored to pin our host down to the details of the "big game" he proposed to present us, but he was very noncommittal. "Is it tame?" I asked. "Some animals you have fenced in here on your estate?" He shook his head at that.

"Wildcat?" snapped the colonel. An-

other negative. Seeman's thoughts were unreadable behind that fevered yellow face of his. But over our dessert he asked the most startling question of all. "Huntin' *man* tonight, Smithers?" I gasped, but Smithers smiled more blandly than ever and shook his head.

"Don't you think you had better tell us, so that we can be prepared?" added Seeman. "That is, if the whole thing really isn't a joke of some kind."

"You will have time to judge for yourselves later on." Smithers said simply.

"Damn it all! It's all very well for you, but how about us?"

"*Afraid*, Colonel?" asked Smithers lazily.

The good colonel's neck swelled visibly and became a deep purple tint. His mustache quivered, and the lips set firmly. Not another question did he ask, and it was half an hour before he spoke to Smithers again. During that time there was something upon our host's mind—we could all see it. He was nervous and without his usual poise. Several times he cleared his throat as if to say something, but changed his mind every time. Finally he rose to his feet and shepherded us into a curious round room—not more than twelve feet across. Upon the walls were weapons of every conceivable description. Along the baseboard ran drawers which were filled with ammunition. Four cushioned seats were set in the wall in pairs—suggestive of bunks aboardship. From under one of these, Smithers drew whiskey and soda and four glasses and pulled down a small folding shelf to set them on.

"We will start out from this room in a few minutes," he announced.

And now we all, I think, began to wonder together whether something serious might not lie ahead of us. What it was puzzled us to imagine. A barred and grated French door was set opposite the entrance, which had been closed. To this I went and peered out at the darkness. I could make out lights in houses some distance away and the stars revealed the edge of the woods. As I looked, Smithers came over and drew heavy curtains, smiling at me mysteriously.

We joined him around the table and sipped our drinks quietly while Smithers went over our equipment carefully and suggested that we each carry a revolver, bringing the necessary number down from the walls.

"But we already have one each," expostulated the colonel.

"These throw .44 explosive bullets," said Smithers quietly.

The whiskey was strong, for the floor seemed unsteady once or twice—but I thought nothing of that at the time. The room began to feel oppressive and close. I suggested that the window be opened, and Smithers looked at me portentously.

"You don't know what you ask," he remarked, and Seeman cocked his head slightly sideways and studied him with his expressionless eyes. Colonel Marsh fumed a second and then exploded with accumulated annoyance. "Hr-r-rmph!" he said.

"You young devil! How long are you going to keep us here? It's all stuff and nonsense—it is, don't deny it! I've a mind to leave your house this instant!"

His face fiery, he stamped to the door by which we had entered the room and seized the handle. It was locked!

"I really think, Smithers," put in Seeman quietly, "that you'd better explain!"

He looked from one to the other of us, smiling more teasingly than ever. "In five more minutes we will leave this room," was his answer. "We will go out and commence what will be the most exciting and perhaps the most dangerous hunting you have ever experienced. When we return, Colonel Marsh here will gladly pay me the bet."

The room was stifling by now and my eardrums throbbed and my head ached. Smithers drew from a drawer the largest hand-flashes I had ever seen and tried them, one by one. They cast great, searching beams of light against the narrow walls of the already well-lighted room. Silently he handed one to each of us. Then he prepared one more drink all around

and bade us down it. It tasted queer and Seeman eyed him sharply at the first sip. Smithers flushed slightly.

— "It's all right," said he. "As a matter of fact, it's medicine. We'll need it where we're going." He held up his own empty glass as he spoke. When we had drained our glasses and set them down, he cleared them away and made the room shipshape once again. Then he opened a drawer and drew out two dynamite bombs, placing them on the floor beside the curtained French door. The floor jarred slightly just a second before he did so and the walls seemed to quiver an instant—a matter which puzzled me and would have made me more curious than it did had my head not ached so or my ears not been drumming so loudly to the pulse of my heart. Smithers pulled aside the curtains and lifted a heavy bar which kept the door shut. We crowded out into the night.

CHAPTER II

The Beasts

● It was black outdoors and smelt musty, nor was the air so fresh as it had been earlier. The sky was evidently overcast, also, for not a light could be seen in any direction, though I strained my eyes. It was deathly still and none of the usual night sounds could be heard. The nameless oppression upon my senses became more pronounced than ever and my ears hurt me when I swallowed. Smithers said: "It's rocky going for a bit; watch your step!" and turned his flash on the ground.

We were, I imagined, going down the slope to the little pond behind the house, but I hadn't remembered it as being so steep. And there was hardly a vestige of earth over the rocks—and no vegetation whatever. This puzzled me at the outset, but after we had walked a good half mile down a steep boulder-strewn incline, I was much more than puzzled—I was amazed. Smithers silenced one or two attempts at conversation, and we stepped as quietly as we could, but must have made noise enough to be heard a mile away in that quiet place. Presently he halted and turned off his light. We gathered around him in the intense unearthly darkness.

"Now we must go carefully—use your ears as much as your eyes," he whispered.

"Use them on *what?*" grunted Colonel Marsh from the black void.

"I can't tell you."

"Why not, man? Is it secret?"

"There are no words in the language to tell you—I have been here before and I saw . . . . I can't tell you what. Don't you suppose I would if I could?"

"Will you tell me frankly," put in Seeman, "are you serious . . . . not trying to play a joke?"

Smithers groaned impatiently. "If you would stop whispering and listen and look you might see for yourself!"

As he spoke, I saw something and gripped Seeman's arm hard. It was a faint, distant light, rather phosphorescent, I imagined, which seemed to float through the air a hundred yards away. It was receding and vanished shortly after I saw it. Memories thronged to my mind of tales my old Scotch nurse used to tell me when I was a child . . . . will-o'-the-wisps! Silly, perhaps, but what rational explanation was there?

We had all four of us seen it, evidently, for not a man moved—we barely breathed. Then three tiny sparks showed at some distance quite indeterminable in the darkness and seemed to play with each other, dancing in a dreamy pattern against the heavy velvet black. We heard Smithers shuffle forward cautiously and followed him in a bunch. For perhaps five minutes he continued—seeming to feel his way with his feet.

"This is as far as I came before," he said. "It drops away here sharply." As he spoke, he flashed his light down at his feet and we started back at the sight of a sheer cliff twenty feet or more deep, with a flat area extending away below into the darkness. The shock of sudden light staggered us. Then the light flicked off and we could see nothing for a full minute. But we heard something! As if in

answer to the light signal, a hissing began far away to the right and Smithers whispered: "Get your guns and lights ready!"

I flashed on my light at once and its great beam cut a hole through the darkness down toward the hissing. Something grayish-yellow moved there . . . . was approaching. It seemed an enormous distance away but came on at a terrific rate of speed. Then it began to take shape and form to my eyes and . . . . it was indescribable. A huge head filled with needle-like teeth and soft-looking shapeless legs—that may give some idea. The mouth was open and its cavernous size shut off almost all view of the body. I had hardly time to gasp before Colonel Marsh's elephant gun went off like a thunderclap. He must have missed, for the onrush did not pause a second. The hissing was like steam escaping from a boiler now and the Thing flung itself against the rocky bulwark as Seeman and Smithers fired point-blank at its open mouth. But on it came, the momentum of its charge, I suppose, enabling it to give one last upward leap that brought it half over the ledge. We leaped away as the explosive bullets burst inside it and my torch wavered off the huge body an instant.

When I turned it back again in fear and trembling, half-expecting to see it charging me, I illuminated the great mass lying inert half over the precipice.

"Hold the light steady," Smithers called to me. "Let's try to pull it all the way up."

The three of them tugged and strained for a few minutes and succeeded in moving it two feet. I moved up close and started back at the odd odor—like spoiled eggs. The Thing was easily twelve feet long and must have weighed a ton. It was brownish yellow and hairless. But the mouth was the startling part of it, for the jaws were like two semi-circles three feet in diameter and the teeth like so many spears set in it—hundreds of them. Somewhere I vaguely remembered seeing a mouth and teeth like that.

"Great God, Smithers! What *is* the thing?"

"You know as much as I. Do you suppose we could get it back to the gun room?"

"Better phone the police! A beast like this roaming the countryside—"

"Hmmm!" said Smithers. "Quiet a moment!"

We strained our ears and eyes. One of the distant lights was floating toward us! As we looked, it rose over our heads and swooped down. One of the guns roared out as my light revealed a black bat-like flying creature. The body twitched and tumbled at my feet. I stooped and picked it up in amazement, for its mouth and teeth were strongly suggestive of those of the great beast we had killed. From its forehead, a long springy tendon, dangled a bulbous lump of phosphorescence! Now I remembered where I had seen such forms of life—photographs and paintings of deep-sea monsters. They were for all the world like it.

"We must get this great beast thrown back below!" announced Smithers suddenly and with alarm straining in his voice. "For God's sake lend a hand!" As he spoke, he began thrusting and pushing frantically and stopped a second to call out to me: "And put that light out!"

I did so and we all helped him at his task. It took us a full two minutes in the dark to move the carcass a foot or two nearer the edge, where it slowly toppled over and thumped down to the ground below. "Now keep quiet for your lives!" whispered Smithers from out of the sudden blackness.

I heard something then—a far-away hissing that approached until I could hear the soft thudding of great shapeless paws below—then a sudden loud hiss and the sound of jaws crunching on food. After a few seconds, the sounds ceased and another distant hissing was audible and still another in a different direction, both approaching. We were not breathing at all by now, I'm sure of it, and the hair on the back of my neck was bristling

like a mastiff's. Suddenly, a furious snarling and crunching and scrambling broke out below us as the enormous beasts quarreled over their gruesome meal and so dark and utter was my blindness and so taut my nerves that when I felt a touch on my arm, I almost screamed aloud. But it was Seeman pulling me away. He put his mouth to my ear and breathed: "Smithers says to get back while we can."

● We dared no light, but Smithers seemed to know the way, and we stumbled, sweat-sodden, back up the rocky slope as quietly and quickly as we could. It took us fifteen minutes to come to the house—which was itself completely shrouded in the darkness—and the only way I knew we were there was by the feel of the doorway and the cold iron of the barred door. This was slammed to behind us and the heavy bar let down and the curtain pulled across before Smithers flicked on the electric lights. And even then, he uttered no word until he had pulled and adjusted the heavy curtain so that no light should shine through into that horror-ridden night outside.

Not until then did I realize that I held clutched in my hand the dead body of the luminous bat, but once I did notice it, I smelt it. So did the others. It was a pretty bad stench, as such things go.

"Throw it outside," said the colonel.

"No . . . . I have an electric refrigerator here. Let's keep it for examination tomorrow," and Smithers pulled out another drawer to reveal a compact electric ice-box. Then he busied himself wrapping the weird thing in wax paper and seemed to me to ask needless advice and to be attempting to keep all three of us watching him—as though he hoped we might not notice some mysterious matter he wished concealed. When the ice-box was closed, he examined Seeman's rifle and compared it with Colonel Marsh's. That left me free to look about and he noticed it—or so I felt—and suggested that we needed a drink or two all around. He took a long time preparing them, and before we were half through downing the first, he suggested a second.

Seeman looked at his watch. "Twelve-thirty! No more for me. I'll be turning in about now, if you don't mind."

Colonel Marsh glanced up sharply. "Before the police are notified? Do you realize that those beasts out there are a threat to the safety of thousands of unsuspecting people?"

Smithers cleared his throat nervously. "Who would believe you?" he asked.

"I'd bring them here and show 'em. Bring a regiment!"

"Tonight?" Smithers smiled scornfully.

That *did* stump us, for obviously, no one would come until morning — and what could we do to protect all Long Island between now and morning?

"But you've seen them before! Why hasn't something been done before this? Where could the things have come from?"

Smithers' face became teasingly earnest. "At dawn tomorrow, we will go out through this door and you will understand why nothing has been done," said he.

"I'm going to bed, then," announced Seeman and strode to the door. It was still locked and he turned impatiently toward Smithers, who walked slowly up to him and fumbled for a key in his pocket. He took forever to get it into the lock and then he did not turn it, but as if a sudden thought had struck him, he said: "How about the bet, Colonel?"

That worthy's mustache bristled and his face became suffused with the color of annoyance. "I suppose you've won," he admitted, "but it's a terrible thing to claim you have shown us dangerous beasts roaming in this suburb and in the same breath deny that any steps should be taken to protect the citizens!"

And then I felt the floor give a slight jolt and I saw a gun that was hanging on the wall beside me quiver slightly. At the same instant, Smithers turned the key in the door and threw it open. We walked through the hall and into the library. Before we were shown up to our rooms for the night, Smithers assured us very earnestly once more that he knew what he was doing and that he would ask us not

to make fools of ourselves by phoning the police then. "After you have looked over the ground tomorrow," he added, "you may do as you please—you will be puzzled, at least."

Colonel Marsh grunted, thought for a moment, and subsided dubiously.

Speaking for myself, I slept little, being too excited for rest, and at the first sign of dawn, I rose and looked out of the window in my room. From it I could see one corner of the lake and the slope down to it. Beyond rose a mere handful of large pine trees and they screened—another house beyond! Where then had we seen the beasts last night? I sat there bemused for half an hour and then dressed, descended to the library, and discovered Colonel Marsh fuming up and down the room. To my "Good morning!" he glared silently.

"Have you seen it? It's some foolishness of Smithers, depend on it!"

"What do you mean?"

"There is no such place as we thought we saw last night!"

"Oh come!"

"Come out and see for yourself, man!"

But Seeman entered then, and a few minutes later Smithers' butler announced that we might have early breakfast if we wished. Mr. Smithers would, he indicated, sleep another hour. It was not yet seven. We ate hurriedly and made for the gunroom, which we found as we had left it. We pulled the curtains apart and opened the French doors upon the garden. Before us the ground sloped away—rock-strewn, it is true, but the rocks were in ledges and beautifully planted with dwarf and curious sorts of evergreens. At the foot of the incline gleamed the little lake and beyond that the pines marked the edge of the estate. I mentioned that I had seen another house beyond that again, but we all wanted to explore and see for ourselves. In ten minutes we were at the edge of the pine woods and looking out on several houses spaced in half-acre plots and a highway beyond!

What could be the explanation? Back and forth we hunted—Seeman suggesting that there might be a large cave opening, but we found no possibility of this—lawns and shrubbery borders were neat and omnipresent. Yet somewhere here, the three of us, a few hours ago, had been in deadly danger of our lives!

Very much startled and full of wonder, we returned to the house and passed through the gunroom. Seeman stopped suddenly as we entered the laboratory. We looked up expectantly. "No," he announced to himself, "it couldn't be that . . . . or could it?"

"What?"

"I was thinking . . . . I've seen some queer things in the East—India and elsewhere—you don't suppose Smithers made us imagine all that last night?"

I laughed aloud, but Seeman's expressionless stare seemed to indicate some slight doubt, at least. As we stood there, Smithers came up behind the colonel at the doorway.

"Been out looking around?"

"Hr-r-rmph!"

"Want to phone the police, Colonel?" and his smile seemed like a match to that worthy's temper. I don't know what he didn't accuse Smithers of—dabbling in magic, attempting to win a bet by mesmerism, fraud, poor sportsmanship, and much more.

Smithers smiled. "Have you looked in the ice-box where we left the smelly bird?"

Colonel Marsh started visibly. "By George!" and he was gone.

We followed and found him in the gunroom trying to find the right drawer. Smithers went forward and pulled out the proper compartment and opened the air-tight cover. Then we held our noses for dear life, for the stench was frightful and Smithers reached a long knife that hung near by on the wall and lifted something dark brown and gruesome on the point. It was decaying by seconds as we stared, and we had just time for a glimpse of the outlines before they softened. Pieces dripped off onto the box beneath. "Ugh!" said Smithers, and let it all drop out of sight. He closed the cover.

Colonel Marsh stared at the closed box

as though he had seen a rabbit produced from a magician's hat. Then he strode over to his rifle, leaning against the wall, and opened the breach. "It must be true," he grunted and put the weapon back, to stalk in dignity back to the library.

"Don't suppose you'll tell," drawled Seeman.

Smithers merely smiled.

When we returned to the library, we found the colonel writing in his check book on the side table. He tore out the check, waved it dry, and handed it to Smithers who accepted it gravely. "Was it really as we saw it last night?"

"Yes, Colonel."

"Those beasts still exist now?"

Smithers nodded, seemed about to speak, changed his mind, and nodded again.

I was so curious by now that I thought I should burst. But when Seeman drawled that he thought he would start back to town, I agreed. It was maddening to stay here and have no way of learning anything more. Better to try to forget the whole affair. The colonel packed his things at the same time, and when we got to the door, our car had been brought around for us. We got in silently and Smithers stood beside the car bidding us good-by.

I started the engine and waved my hand. Smithers leaned on the window and said: "This is Saturday. If you three are at the Stranger Club about this time of the morning next Saturday, you might hear from me again." And he turned and started back to the house.

As we rolled along through Long Island traffic, we discussed the matter and agreed to be there—though what possible explanation could he have for what seemed to us an insoluble mystery?

CHAPTER III

Smithers' Letter

● The following Saturday I was at the Stranger Club a few minutes after nine and found Colonel Marsh stamping about through the empty rooms before me.

"Where's Seeman?" he demanded, and without waiting for an answer, continued pacing up and down. "Not that I really suppose Smithers will come or send any word—the most thoughtless young whippersnapper I ever knew! Here I am wasting a whole day waiting for nothing, and no one here to get me a drink!"

I was full of curiosity myself, but could not help smiling at the colonel. Somehow our adventure of a week ago seemed far away and unreal and—not very serious. We rather looked forward to an explanation, I believe. Great Heaven! I marvel now that I could so soon have forgotten that three-foot mouth set with a thousand teeth! But so we are made. The club steward arrived at nine-thirty, and the colonel blew him up until a drink was placed in his hands; after that he grew calmer, and presently Seeman arrived. We sat around in chairs and fidgeted for half an hour. The colonel was, in fact, just rising to his feet with the announcement that he would waste no more time on wild geese when the front door opened and we heard footsteps approaching. We turned as one and saw—Smithers' butler. He came forward and handed Colonel Marsh an envelope and retired to the hall where he waited patiently while the envelope was torn open and a dozen typewritten sheets spread out. We three put our heads together and read. When we were half through, Seeman called to the butler: "Are you waiting for us?"

"The master said you might be coming out to Paulings. The chauffeur has the big town car outside, sir."

"Then let's start *now!*" I cried. "We can finish this on the way out."

We reached for hats and coats and rushed out to the limousine at the curb. It started immediately at a speed which increased when we had finished the manuscript and had commenced to urge the chauffeur to hurry up. He half turned in his seat to look curiously back at us, but the butler beside him never showed any hint that he was interested—sat stiffly looking straight ahead.

This is the letter Smithers had written, addressed to all three of us by name:

* * *

Perhaps you have not yet guessed the explanation of your adventure last week. It was a little cheeky of me to make you guess, but I have my reasons. Those animals, of course, do not roam Long Island. They are on a different level of existence—about two miles different. Now have you guessed? The gunroom is my elevator—perhaps you noticed the floor shake as it came to a rest? Down below the earth is a cavern of sorts. Here dwell the beasts that we shot.

I first came upon the entrance making my rock garden and climbed into a mere crack in the rock that led underneath my own cellar, then turned abruptly downward. The walls were smooth and showed signs of ancient heat, so that perhaps it was once (thousands of years ago) a vent for some prehistoric volcano. I blasted an entrance into it directly from the cellar and spent my days and nights exploring down its sheer depths with ropes and ladders supported on iron bars driven into the walls. Month after month I worked and hardly believed the depth I reached. I came to the bottom five thousand feet below and found the great cavern you mistook for a Long Island landscape in the dark. This was two years ago.

I determined to keep my find a secret and have all the fun of exploring to myself, but a mile's climb is no fun at all and I spent a good many thousand dollars arranging an electric lift and, finally, smoothing the walls and building an elevator cage in the form of a room. I do not know exactly what I intended—perhaps using the cavern, brilliantly lighted, for a grand ballroom or a theater. The true meaning of my discovery did not become apparent until all that preliminary business was finished. I had had the workmen brought from a distance and discharged them in the hope that no one would believe any of them if they did talk. I also discharged all my servants, finding the good ones positions elsewhere, and hired a new staff who know nothing of the shaft or of the secret use of the innocent-looking gunroom, into which I retired for long periods and locked the door.

About six months ago, I armed myself with flash light and lunch and descended to make my first exploring trip. I followed the course we took last Friday and came to the cliff. It is easy to climb down it and I did so, swinging my feeble light in awe over that great rocky plain and up to the blackness of the lofty cavern roof. I heard the hissing noise approach without fear, until my light revealed the charging monster at scarcely a hundred yards distant! I was totally unprepared for any danger and dropped the light to scramble panic-stricken up to safety. Here I stopped, panting, to see the still-burning light blotted out by the body of the attacker. The flash was ground to pieces and I began to wonder how safe I might be even there when a second beast charged and a furious fight broke out below me in the absolute darkness. I took advantage of the noise to make good my retreat and climbed the long hill to where I thought the elevator was. Only it wasn't.

I had two matches in my pocket (no more, even though I am a pipe smoker) and I lit one to find myself in absolutely unknown territory. I imagine that I lost my head in the blackness down there and stumbled aimlessly for I know not how long, most of the way downhill again. Presently I bumped into a rocky wall and groped around to find myself in a tunnel about twenty feet across. I knew this was not the right direction and was about to turn and retrace my blind steps when my eyes, enormously sensitized by the constant dark, caught the faintest hint of redness on ahead. Perhaps the most foolish thing I could have done was to go forward to see what the light portended—but a man lost in the dark has no choice; he *must* follow the light even if it be a dim ghost of a gleam. My light led me half a mile to a cavern that felt large, though I could see none of it. What I saw was a sea of faint light.

Close down on the ground it lay. I reached down my hand and touched something that crumbled and a stench assailed my nostrils that made me giddy. I walked in light up to the ankles, as though it were water. This, please, a mile or more below the surface of the earth—without benefit of rain or sun. For the light was obviously phosphorescent and betokened life of some sort.

I was nauseated by the odor and weary. A sudden fear sent me scurrying back to make sure I could find the tunnel entrance again, for I knew that I must return. Further exploration could wait until I could equip myself properly. First I must find the elevator cage. I groped my way back along the tunnel and never really knew when I came out of it into the inner cave. But the ground began rising and felt boulder-strewn and I hoped that this fact might guide me. It did, after a fashion, and an hour later when I had despaired of ever succeeding, I lit my second and last match recklessly and saw my objective twenty feet away in the half-lit gloom. I entered and pulled the ascending lever and spent an impatient half-hour rising to my home above. I had been down seven hours by my watch.

● I apologize for this long history, but it is essential to an explanation of what happened to you and what I now intend doing. I made a second trip down a week later with a powerful flash-light and a good rifle. I determined to explore only the rocky slope at the summit of which the elevator shaft rested. I took a compass with me and paper and sketched a map which I give here.

To the north, as you see, the slope ends in the low cliff and beyond that a huge area inhabited by beasts too dangerous for me to approach alone. On the east I found the entrance to the long tunnel that leads to the cave of light. But before examining in that direction, I made the circuit of the south and west and found it all walled in harmlessly except for one huge gap of a hundred yards where the rock steeply fell away into the water of a large underground lake. It was more than half a mile across, I judged, or I should have seen the far side in the unreal beam of my flash-light. It might be a hundred miles, for all I could tell, for I have not yet gotten around to exploring its gloomy surface in a boat. This preliminary work occupied several hours. When I got back to the surface, I felt more comfortable about further work, for the beasts evidently could not attack me unless I climbed down the natural barrier that hemmed them in. Fortunately, I did not tempt them,

for you will remember that the one we shot almost reached the top of the cliff in his charge.

I determined to solve the mystery of the phosphorescence and made a trip into that tunnel-entered place for specimens. I got them, in spite of the smell, and brought them up for examination in the sunlight. They were more like mushrooms than anything I knew—the round puffball kind—but in the light of day, they quickly decayed and lost shape and form under my eyes. In a few minutes, they were putrescent, smelled to high heaven and dripped messily. I had the mess saved in a bowl over which I had been holding the things, and this bowlful I had analyzed. Then on another expedition, I saw one of the luminous bats and shot it and brought that

up to examine. You know what happened to it, for you saw the one Colonel Marsh shot and how it looked the next morning. I had that analyzed too.

The results weren't anything definite, but indicated something to me and I became interested in subterranean life generally. I got a good many books on the blind newts and fishes found in famous caverns the world over—managed to get a few specimens as well, and I had them analyzed to compare with my own findings. Here's my theory, for what it's worth. Up to my discovery, all the underground life discovered has been merely surface types adapted to darkness; even the fish dredged up from the lowest depths of the sea have been considered merely adaptations of surface life. Now suppose that life had been trapped in caves far beneath the earth hundreds of thousands of years ago. Suppose that the pressure rose gradually and the caverns continued sinking and impurities were in the underground atmosphere—sulphur for instance—and over long periods of time life changed to meet these conditions and survived in a new form. Exits might occasionally appear leading up to the surface, and the emerging blind things would fall easy prey to the surface *carnivoræ*, so that all who emerged, died. Some types would be incapable of emerging because the rays of the sun would be painful and drive them back. These would breed and survive below.

Legendary history is full of such hints. Dragons were supposed to dwell beneath the ground and to emerge from caverns breathing fire. (Does this possibly mean that dragons were adapted to an atmosphere where oxygen was lacking, its place being taken perhaps by sulphur, and that upon coming into the upper air their breath burned?) Moreover, if legend be credited, the Greeks believed Hades a place where men ate dust in dim darkness and hell-hounds with huge jaws guarded the entrance. It sticks in my fancy that we may have shot a regular classic hell-hound last week.

Well, then, how about devils? Might they really exist down below? Cloven hoofs, leathery hides, horned heads and forked tails—all complete? Frankly, I should not be surprised. Moreover I shall find out, if I live. A month ago I made an expedition to the cave of light and walked a good five miles by compass over its vegetable-dusty floor. I came to a canyon in the form of a gap in the floor half a mile across and almost that in depth. Peering over, I saw, far below, half a dozen pits of fire glowing—probably volcanic. The air down there is steamy and the light only a dull redness. I cannot be sure, but I am almost certain that I saw figures moving about the fires. I had a great coil of rope with me and the sides of the canyon were rough enough at one spot to attempt the descent. I did so, and half way down, the steamy air bellied up around me and I nearly choked, for it smells of "fire and brimstone," as the ancients put it. I clung, gasping, to the rock until the steam swirled free so that I could climb up again.

It was then that I determined to see whether I could obtain discreet assistance. You know how I inveigled you to my place and together we fought the hell-hounds. So poorly did the experiment work that I can see no advantage in having rifles back of me when I explore. Why risk four lives instead of merely my own? By the time you read this, I shall be down there solving the mystery of the fiery canyon. If its dangers are insurmountable, I shall not return. If I succeed, then I shall gladly have your help in further studying and examining my underground kingdom—avoiding altogether the cave of the beasts.

I have made these preparations: a strong and light ladder of silk rope and a diver's suit and helmet of rubber—the kind with an oxygen tank strapped on the back. There is a telephone in the helmet and two fine copper wires lead back to the elevator cage behind me—more to enable me to find my way back at a run if the need should arise than for any necessity to be in communication. But I shall be able to communicate with you, if you wish, from the telephone hidden be-

hind the encyclopedia in the library in my house. So, you see, you need not miss the fun even if I decline to permit you to share the risk. I have made arrangements so that you can get out here if you want to about the time I start the descent from the floor of the cave of light down into the canyon.

There may be devils down there—or there may be dragons—or merely subterranean fire. If there are dragons, how about our bet, Colonel? Twice won?

* * *

We finished this amazing manuscript as the big car trundled across the 57th Street bridge. "Damn' fool!" snapped the colonel, with plain envy and admiration written all over his face. It was about then that we persuaded the chauffeur to really step on things and get us out to Paulings as soon as he could. Why we weren't arrested a dozen times, I cannot now imagine.

CHAPTER IV

Terror of the Caverns

● We thrust our way past the scandalized footman at Smithers' house. He half turned after us as if to fight for the decencies, when the butler stalked up in dignity after us and made all right again. We burst headlong into the library, oblivious to all else, and threw the volumes of encyclopedia unceremoniously onto the floor. There was a telephone with its receiver replaced by a small metal piece and connected by wire to a box type loud-speaker. Seeman leaned over and called "Smithers!" Then Colonel Marsh pushed him impatiently aside. "Smithers! You young idiot! Can you hear us?" he yelled.

The loud-speaker chuckled. Smithers' voice came quietly from the box. "You got up there pretty quick. I'm just adjusting the diving outfit now. If you'd called five minutes ago, you would have had to wait until I put this helmet on to get an answer."

"We want to come down and stand by while you climb into that canyon," said I.

The colonel burst out: "We *are* coming down, you hear?"

Another chuckle from the box. "Afraid that won't be possible. The elevator is pretty well concealed. I sent it up again, it's true—but to prevent any one coming down to this place rather than to permit them to do so."

"We'll smash the floor of the gunroom and climb down the ropes!"

"Two inches of steel and six inches of composition in that floor, Colonel. You'd need dynamite. Besides, what could you do? I've just fastened the silk ladder and thrown the tail of it over. Now I shall start climbing down. If you three were waiting for me here, you couldn't help me when I get down below there. While I am climbing, I am safe from the hell-hounds, but if one came into the cave of light while you were here, he would attack you. You can't help me but you can harm yourselves."

"Damn it all!" shouted the colonel. "Do you suppose we are afraid to risk ourselves? We're going to get down in spite of you!" And he rushed away to the gunroom with Seeman and myself following. We spent ten useless minutes searching every drawer and cupboard for hidden mechanism, but were compelled to give up the search. The colonel ruined a beautiful shotgun by using its barrel as a crowbar and pounding on the floor of the room with it. The floor gave off a very solid-sounding sort of thud and I left to go back to the telephone in the library.

"Where are you now, Smithers?" I asked.

" . . . . Ugh . . . . just a . . . . ugh . . . . there! Pretty near halfway down." There were sounds of heavy breathing. "Did you all go away, or what happened?"

I told him of our attempt to find the hidden elevator apparatus. He laughed. "Foolish! You'd never find that! Besides, I set the controls from below when I sent the car back up to the surface. You'd better stay by the telephone and enjoy this adventure second-hand, instead of wasting your time."

Seeman and Colonel Marsh entered just then and heard the last half of Smithers' remarks sheepishly enough.

"Hard work climbing—even on a ladder—and the darn thing swings a bit—and this diving suit is the most uncomfortable thing I ever wore—have to rest—every few minutes . . . ." and the loud-speaker panted.

It took Smithers half an hour to reach the bottom of that buried canyon. All through the climb, we exchanged the maddest kind of conversation—particularly during the brief and frequent periods he found it necessary to rest.

"The steam is swirling around my feet," he announced once. "It looks yellowish right now and the fires below are orange and the rock beside me is a smooth, shiny black—though there's so little light that the colors are more imagined than seen, except where the fires show through. I have my flash-light and an automatic, but somehow these don't seem the proper weapons for this world down here."

Then another time: "It's all black and cloudy around me now—I can make out the fires though, so I suppose I could see through the mist fairly well if there were any light. I don't dare turn on the flash. You know, if I do find life down here, it will be a queer sort of life! I suppose strong sunlight would kill it in an instant . . . . yet there's another idea: Millions of years from now when the sun cools and the air on earth freezes in its red rays, these creatures down here—if they exist—may come out onto the surface and inherit the earth."

Vague ideas flashed through my mind as he spoke: Powers of Darkness imprisoned down in the earth by the Face of Righteousness, evil things that cannot bear the light of day. "Smithers," I said. "They could come out now during the night!"

"Perhaps they do," he grunted. "This damned telephone string is a nuisance!"

"Don't you dare cut it!" thundered the colonel.

"Sha'n't, don't worry! I may need it to find my way back to the hanging ladder."

"What do you mean by saying 'perhaps they do'?" I persisted.

"Devils, dragons, will-o'-the-wisps, gnomes, elves—they are all night-going apparitions, aren't they? Maybe they used to sneak out of caves at night and return at dawn. Maybe they never existed. *I* don't know! . . . . By Jove! No . . . . *yes!* I'm at the bottom!"

There was a period of silence. We could hear Smithers' breathing as though we had stood beside him. For ourselves, we scarcely breathed at all. "Can't see the fires from down here . . . . mighty dark . . . . God! What was that? . . . . I thought I felt some little thing scuttle off through the darkness . . . . . it's disturbing not to be able to see or hear anything . . . ."

The voice trailed off and there was another moment of silence. I licked my lips drily. We could hear the thud of slow feet and an occasional stumble and knew that Smithers was walking.

"I see a faint glow of red against the blackness," his voice whispered. "I suppose that's one of the fire pits . . . . yes it is, I can see it better now . . . . but there doesn't seem to be any animals around it . . . ."

Another pause. "Well, the coast's clear at this pit, anyway. Perhaps I only imagined that I saw things down here . . . . but I was pretty sure I did . . . . Good Heavens . . . ."

The voice stopped. "Speak up, man! What is it?" we shouted in unison.

"Hmm! I suppose it's lava. The hole's twenty feet across and about a hundred yards deep, and the fiery stuff down at the bottom keeps moving slightly up and down—like a pulse beating in torn flesh. Rather giddy thing to look down into . . . . ." Then we heard the thump and shuffle of his further progress.

"Seems to be no life here at all. I'm going to chance the flash-light . . . . Lord, but it's a big place! And not a thing . . . ." We heard the quick indrawn breath that held a second. "Dear God!" and the *thump, thump, thump* and the heavy panting breaths.

I leaned over to the instrument. "What is it Smithers?" I whispered anxiously. There was no answer but the sounds of running. Then: "The place is full of them

. . . . thousands . . . . such horrible things . . . . like a nightmare . . . . thank the Lord I thought of leaving this string trail to follow . . . . they are after me . . . .” He was evidently talking to himself more than to us and we did not dare speak now. “There it is . . . . thank God . . . . about time, too . . . . ahh!” Then we heard sounds of very heavy breathing which we took to mean he had found the ladder and was ascending—then a pause while we supposed he regained his breath.

“That was a close thing (pant) but I'm twenty feet up now (pant) and . . . . they've come to the foot of the ladder but don't dare climb it (pant). I can see them plainly in the light of the flash down there. You never saw such things . . . . like brown leather . . . .”

● We heard the sharp intake of breath and then slow and horrified: “This ladder is moving! *There's something above me!*” Our nerves were taut to the breaking point, and the colonel leaned forward with bulging eyes. “Shoot your way up!” he cried.

There was on the instant the sound of a shot and another and another in quick succession till we counted ten. Then Smithers cried out unintelligibly and we heard sounds of struggle and blows struck, evidently on the metal diving helmet, then a scream, long drawn out and blood-chilling, ending in a crash and silence . . . .

“My God! I can't stand this! He's been knocked off the ladder and probably killed,” cried the colonel. He paced the floor clasping and unclasping his fingers.

But Smithers had not been killed—would to God he had! A groan came from the loud-speaker and we rushed to it. “Smithers, old man, can you hear us?”

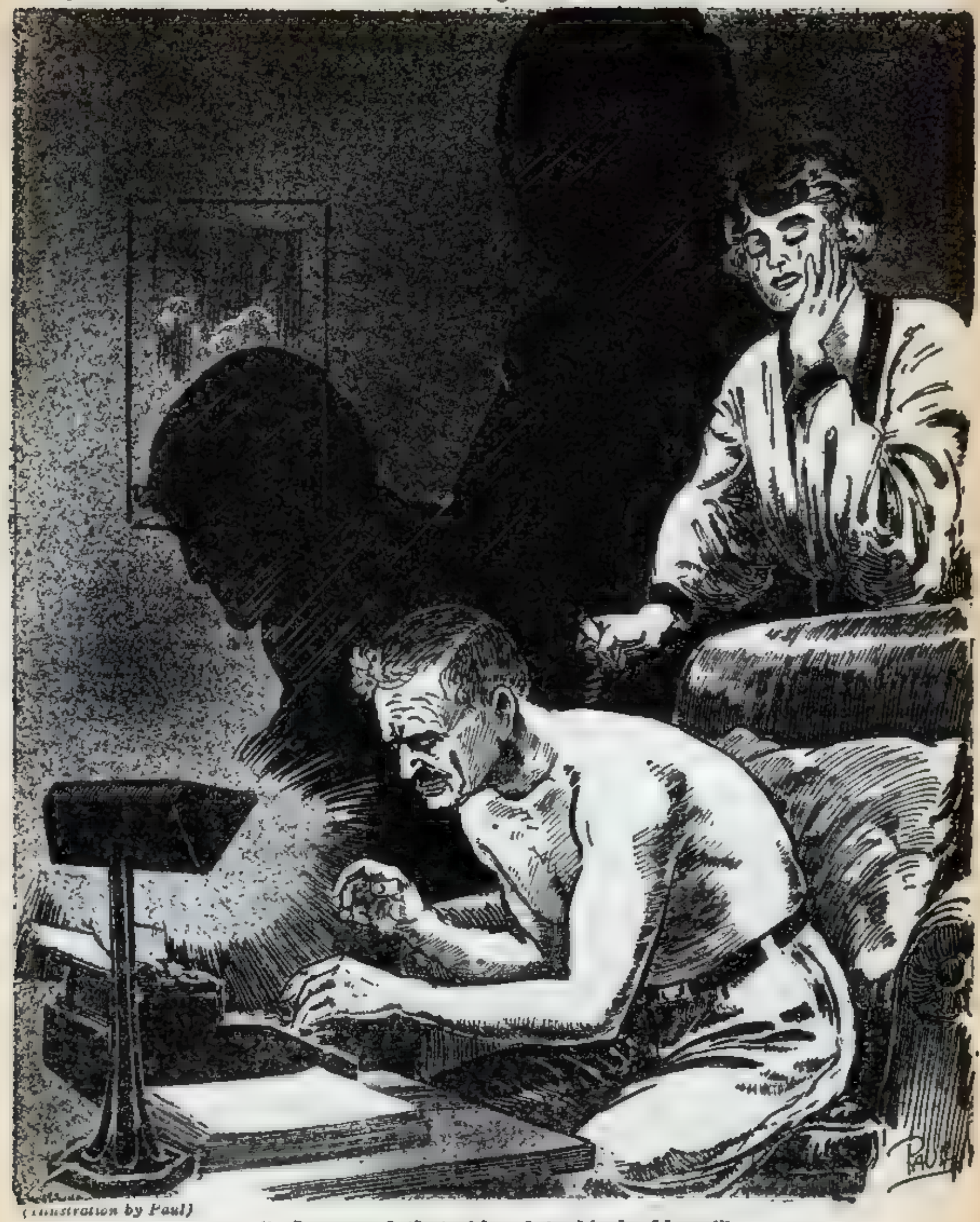
Another groan. “I'm done for,” he said weakly. “I think my back is broken, for I can't seem to move either leg . . . . What a fool I was not to let you come down with me! . . . . The flash-light didn't break; it's just out of my reach and lights up everything on my right side . . . . that's where *they* are . . . . *they're coming!* Colonel Marsh! Colonel Marsh! Turn off the speaker . . . . ahh!—please turn it off! You mustn't *hear*—no one must hear what . . . . dear God in Heaven . . . . this isn't happening to me; it's a nightmare! It must be! Just a dream and I'll close my eyes and not see those teeth . . . . when I wake up, I'll laugh at it all . . . .”

Then we heard quick breathing and . . . . the next five minutes were unendurable. I cannot bear to put it on paper. Colonel Marsh bowed his head so that his ears were cupped by the palms of his hands and he kept muttering and moaning to himself. Seeman stood with hands behind his back and his yellow parchment-like skin seemed to tighten on his cheek bones, but his face was as meek and expressionless as ever. When he reached forward with a horrible oath and ripped the instrument from the wall to smash it on the floor, his action seemed incongruously violent. In the sudden silence. I looked about the room aimlessly, trying desperately not to be ill and noticed how peacefully the sunlight rested on the table beneath the window — healing, sane sunlight . . . .

We made fools of ourselves then. We tried to tear up the steel-braced floor of the gunroom and the butler objected. His master, he informed us, had left word that we were to be brought here—but he had no authority to permit us to tear the house apart. We tried to explain what had happened or was happening to poor Smithers, but he stared stiffly and incredulously and stalked off to phone the police.

That sobered us, but we agreed that the matter would have to be turned over to them anyway. We awaited their arrival in morose silence. We needed every drop of the stiff brandies we took while waiting, for our nerves were frayed to the breaking point. But when the two rather stupid patrolmen arrived, they listened with growing suspicion to our frantic arguments. Finally one leaned close to the colonel and sniffed reminiscently.

(Continued on page 916)



(Illustration by Paul)

"—I screwed that thing into his backbone!"

THE LITERARY CORKSCREW

By DAVID H. KELLER, M.D.

● Doctor Keller's psychological stories have been a favorite of science-fiction fans for six years. Here is a good old typical "Kelleryarn." This coined word signifies the style in which only Keller can write.

When anyone shows an unusual ability in any line, you say that he's "gifted." Just what does it mean to be gifted? Why are some people "born" artists or authors? You will find a plausible answer in this story.

● The last patient to enter the Doctor's office that afternoon was a rather indefinite type. She had made a previous appointment for that late hour with the request that the specialist give her at least an hour of his time. This was so unusual coming from a person who was absolutely unknown and who had no letters of introduction, that Dr. Newberry had looked forward to the consultation with a certain amount of curiosity mingled with a peculiar dread. The last lady who had asked for an hour of his time had tried to blackmail him, and since then the doctor had always been rather shy of unknown females who asked any favor out of the ordinary.

This particular lady did not seem one to cause him fear or his wife jealousy. She was rather pathetic looking in many ways, but at the same time her plain face, when illuminated by emotion, softened till the lines of middle age faded into a glorified sunset. Her clothes were neat, dignified and yet somewhat old-fashioned. Compared with the average woman of middle age, she seemed to lack something. The Doctor felt that in some way life had been unkind to her. Even before she had said a word, he decided that he should pity rather than suspect her.

Without a word, she handed him the letter which had confirmed the appointment, evidently wishing to use this as an introduction. The doctor took it and looked at it casually and then handed it back with a slight bow, as he said:

"So you are Mr. Henry Cecil's wife? That is rather an odd way to say it in this feminine age. Please sit down, Mrs. Cecil, and tell me what I can do for you. It seems that you asked for an hour of my time. Is that correct?"

"Yes, I wanted to consult you. But first I want to pay you for the hour. How much is it?"

"That depends on what has to be done. I have no fixed charge for my service. Tell me your trouble."

"I would rather pay you in advance."

"All right, if you insist. Say twenty-five dollars."

"Here it is. Mr. Cecil and I are so afraid of debt that he made me promise not to confer with you till you were paid. The case is a very odd one. I presume that you are governed by the laws of medical secrecy in regard to your patients' histories?"

"Absolutely. It is particularly necessary in my speciality of neuro-psychiatry."

"Then I can start in and tell you all about it?"

"Yes. Start from the beginning, and give any detail that you wish. How long ago were you in perfect health?"

"I am not the one who needs your advice. It is my husband."

"Then why did you come?"

"We thought it best. We have been married a number of years and I under-

stand his condition so well that it did not seem necessary for him to come—he is rather sensitive about it."

The doctor sighed as he looked at his desk clock. The minutes were passing, and it seemed hard for the woman to even start with her story. He remained silent, however, as he had learned from experience that a hasty interruption often spoiled the entire story told by the patient. So he simply arranged the stationery on his desk and waited. Soon the woman started.

"You see, my husband's name is not really Henry Cecil. That is just a name that we used when I wrote asking for the appointment. The details of his illness are so peculiar that we felt it best to conceal his real name. It is one that is widely known in certain phases of our national life, and I am sure that you would be rather astonished if you heard it. But it will make no difference in your analysis of the case whether you know his real name or not. At least, I cannot see that it will make any difference. So, in any case records you are forced to make, simply write his name as Henry Cecil, age fifty, married, and an author by occupation.

"My husband has always written. In our collection of his manuscript we have an uninterrupted collection of his literary efforts starting with his fourteenth year. Of course, there were years when he did not produce very much, but in some of those early periods he seemed to love nothing so much as writing. After we were married, I made a special study of all those efforts, and was surprised at two things that were prominent. The first was his desire to write, and the second was his inability to do so. I do not mean that he was unable to write, but he was not able to write well. He wrote manuscript like a man would play the piano, self-taught and without notes. I told him once, 'You want to paint but you have no preliminary knowledge of either line or color.' He would make the worst mistakes in grammar, and not only be unable to see them but actually said they were correct because they sounded all right to him.

"For many years, he spent all of his spare time writing. Of course, he had an occupation that required a large part of his time and brought in a sufficient income to enable him to support the two of us. He was a clerk in a book store. The work was congenial, and he loved to live with books, but I always felt that it was not as dignified a calling as though he were a lawyer or even owned the store himself. He worked in the store, rather long hours, and would write most of the rest of the time. While he was working on a story or novel, he was a hopeless companion till he finished it. And then came the sad part. He would be so proud of what he had done, he would insist upon reading it to me, and always ended by asking me if I thought it was good enough to publish. At times he thought I was hysterical as I tried to cover my anxiety and grief at the hopelessness of his effort.

"At first, he tried in a rather half-hearted way to sell his material, but it always came back. He pretended that he was glad; that he really did not want the children of his brain to be paraded before the curious average reader, but I knew that all the time his one ambition was to be able to write commercially. He wanted to get out of the book store and write at his leisure. He would say to me, 'I am tired of trying to sell good books to people who want to read trash.'

"At times I felt that if he was out of the book store, if he had plenty of leisure, that he might be able to do better than he had done in the past, when he had to write at night, exhausted from selling his books. But on the other hand, it was very satisfactory for him to bring home a check each month. Up to this time, his literary effort had cost us quite a bit and had not brought in one cent, so I felt that he had better stay where he was. Otherwise I was sure that we would starve.

"Ten years ago he was taken suddenly ill with appendicitis. He was affected for several days before we realized how seriously ill he was. It was during his vacation. The organ ruptured before the physician realized the condition. But he was

saved, and in a short while, he returned to work again. The day he left for the book store he handed me a manuscript. 'Mary,' he said, 'before that operation, I had a good deal of pain. It lasted for some days. I never said anything about it, because I did not want to worry you, but while I was in that condition, I wrote a story. I wish you would look it over and tell me what you think of it. Seems to be different from the rest of my trash.' I read it that morning and there was no doubt that it was different. It was really worthwhile. To make a long story short, I sold that story for sixty dollars and the publishers said they would buy any number of similar stories at the same price.

"That was good news for my husband. He wanted to give up his position at the book store at once. I had all I could do to keep him from doing it. Finally I promised him that if he could write eleven more stories like this first one, I would take a chance, and let him write for a living. I actually cried that night when he took out his little Corona and started to write.

"During the next month he worked hard, but he could not do it again. What he wrote was just the same poor stuff that he had been writing all his life. Against my will, I offered the stories for sale and found that they were absolutely unsalable. My husband and I discussed the situation rather seriously. He felt that if he could do it once, he could do it again. I felt that his one effort had been a white blackbird. I did not understand it, but I was sure it was an isolated literary freak.

"Meantime, the publishers of that story clamored for more like it. Their readers had approved of it. It had caused countless letters of discussion and controversy to be written to the editor of the magazine. We were in a peculiar position; like that of a prospector who finds a solitary nugget of gold and cannot locate the lode it came from.

Corkscrew Stimulation

● "Six months of discouraging effort passed, and then my husband became ill again. This time he had several infected teeth. There was some pus, a good deal of pain, and in every instance, after several days of useless effort to save the tooth, it had to be extracted, with more pain. There was one week that my husband suffered so that he was unable to sleep. He sat up in bed with an electric pad tied to his face. During these two weeks of almost constant suffering, he tried to forget his ailment by working with his Corona. I forgot to say that he had fever. That was the combination; pus, pain, and fever. I can see now that he was a sick man. He wrote six short stories. After he went back to the bookstore, I read them, and I saw that they were good. They were even better than the one he had sold. I took all six of them to the editor who had bought the first. He read them and was really angry at me. 'You may think this is a joke, Madam,' he said, 'but it would have meant money to both of us if you had sent these in one at a time. I am going to give you a hundred dollars each for these if you will promise me not to hold them back.' I did not argue the matter with him, nor try to explain it. I did not really understand it myself.

"When I told my husband, we had another argument. He again wanted to quit his job. I wanted him to keep on a payroll. I told him that I was not sure that his writing could support us, and he pointed to the six hundred dollars earned in two weeks' time. However, we decided to put the matter to the test — and it worked out the same way it had before. Perfectly well, back at work in the book store, he wrote terrible drivel.

"The publisher made a hit with those six stories. The circulation of his magazine increased one hundred per cent. Naturally, he wanted more — and there were no more to be had. He absolutely refused to consider the other stories my husband wrote, and said they were not by the same author.

"The next five years were just a continuation of this sequence. Now and then, my husband would have a bad tooth, violent pain, fever, and finally a painful extraction. During these periods of suffer-

ing, he would write and we had no trouble selling his efforts. They sold themselves. Editors bid against each other—but the production was limited, and all the time I forced my husband to remain in the book store. At the end of the five years, he had sold over ten thousand dollars' worth of manuscript, but—his teeth were all gone!

"We realized by that time, that there was a definite connection between his periods of illness and his ability to write material that could be sold. I tried to figure it out. Was it the infection, the pus, or was it the fever, or just the pain? It certainly must have been one of them, or some combination. The fact was, that in health, under ordinary circumstances, he just could not write salable stuff, but given certain conditions of disease, he wrote like an inspired Muse. Only, of course, all the Muses were feminine, and my husband is very much of a man.

"I studied the matter from the standpoint of other authors, and I was surprised to find that something similar had happened to all of them. Robert Louis Stevenson could not write unless he had fever. If his temperature was normal, he loafed around, and did not even attempt to write; but when the fever came, he was another man, a man who could, and did write brilliantly. deMaupassant and several other French writers did their best when they were dying from paresis. DeQuincy and Coleridge took opium; Burns and many others could only write when intoxicated; Mary Lamb was at her best when she was passing into an attack of insanity. Swift was insane, Burton a case of melancholia. So my husband was by no means an isolated case."

At this point Dr. Newberry held up his hand to stop her.

"These men you mention were all great men, madam," he said.

The woman flushed as she softly replied.

"So is my husband. You will agree with me when you learn his real name. But allow me to go on with the story. The book store he clerked for went out of business, and he was without a job. I asked him to try to secure a new position in another store, and they told him he was too old. He came home after several such rebuffs and said, 'Mary, this looks like the proper time to retire, and just spend my time writing and enjoying life with you.' It was horrible of me to say it, but I just had to, so I replied, 'My Dear, your teeth are all gone, your appendix has been removed, and your sinus trouble is cured. You know as well as I do that you have to be taken ill in order to write.' He agreed with me, but felt that it was not the actual sickness, but the pain that helped him write.

"As far as I could see, it did not make any difference what the trouble was. The fact remained that it was either the pain or the fever or the pus. He had been in good health for over four months, and during that time, his efforts were those of a high school boy. He even got so he could not think of a plot. Well, we had a little money, and our home was paid for, so I told him to take it easy and make it a real vacation. He was ambitious, never liked idleness, and so he started to do some of the floors over. He was at that one day when I heard him cry, 'Mary! Mary!!' I ran to see what the matter was, and found he had run a pine splinter under his fingernail. Perhaps you know how it hurts. It used to be one of the old forms of torture. He just sat there holding his hand and making no effort to take it out. I asked him to let me see it, but he just smiled and shook his head, and told me to get a pencil and paper. So there he sat on the floor, holding his hand and trying to keep from crying as he dictated the best plot for a story that you ever heard of. I wrote for over half an hour, and then he said, 'Now, that is something like it. I can write that story and sell it. Will you see if you can remove this splinter?'

● "He typed that story on his portable with the injured finger suspended in the air. I took it to one of the publishers and said, 'You know what my husband writes. Well, here is something that is better

than he has ever done before.' The man took my word for it, and gave me exactly one thousand dollars. He was afraid that I would take it somewhere else.

"My husband and I talked the matter over a few weeks after that. He told me that the instant that splinter drove under his finger nail, something broke in his brain and the story was formed. That is why he left the splinter there, even if it did hurt. He wanted to be sure to get the story on paper before the worst of the pain stopped. He said to me, 'Mary. That is what made me write. It is not the pus or the temperature but it is physical pain.'

"I told him it was horrible to feel that way, but he said that he had to make a living somehow. He enjoyed writing, and he just had to sell it. I was a little suspicious, and asked him if he had run that splinter in on purpose. But he denied it. Three weeks after that, he developed a bone felon on that same finger. We had it treated but for three weeks he suffered from it, and during that time he dictated a novel to me, and that novel has sold over one million copies. No, I am not going to tell you the name just yet, but you have no doubt read it. The point is this. He wrote that novel while he was in pain. The publishers asked him to write another and he did—after he had recovered—and it was a bust; a genuine BUST.

"So we knew definitely what it was that permitted him to compose material that he could sell. We lived comfortably for a year, and then we invested our fortune in bonds and lost every cent. It started to look as though we soon might have to sell our house before the tide turned. My husband was in the best of health, so you can imagine what he was writing. He worked hard, three thousand words and better every day, but the publishers wouldn't even look at the stuff he produced, though they all were anxiously waiting for him to go up in the air, as they called it. He was desperate, and so was I, for I knew what was in his mind. I was willing to take in washing, anything, to keep him from it, but at last he said it. He asked me to hurt him.

"Honestly, Doctor Newberry, I love that man better than I do my own life. I would die for him. The very thought of deliberately hurting him made me heartsick and sick every other way. I offered to see if I could get work, asked him to let me sell my jewels, and always he was stubborn. He stopped eating and sleeping, and at last in desperation, when he threatened to throw himself in front of an automobile, I told him I would help him. So we started to experiment, and I saw that he was in some way used to pain—like a drunkard used to alcohol. The little pains, like a needle prick did not do any good. It had to be something grinding, continuous, something that would cause the average man to faint. The little things I did to him were just useless.

"So we evolved a technique. I do not blame you, doctor, if you think us insane, but he would have died if he had failed to support me, and if he died, I would die, too. We had to do something. So we got a corkscrew and sterilized it, and sterilized his back as well as we could, and then he sat down at the typewriter and prepared to write—while I screwed that thing into his backbone!"

"I cannot believe it!" said the Doctor. "I never heard of it—why the thing is impossible! How could you do it?"

"I don't know. I know that I cried all the time, but I never let him hear me. The corkscrew penetrated till it touched the bone, and he started to write slowly. Then I gave it another half turn, and he made his fingers race over the keyboard. He wrote for three hours and then came to the end of the story. I removed the corkscrew gently, painted the wound with iodine, placed a piece of adhesive over it—and fainted."

"I should think so."

"Well, we sold that story. It had the touch of genius, they said. Then they demanded another novel. They pleaded with us, offered us anything we wanted if only we would do it. And we did it. We went through three weeks of Hell, but we turned another best seller over and collected for it. That was a year ago. In

that year we have not tried it again. My nerves were shattered. It was harder on me than my husband, because I had to stand behind him and determine just how far I had to put that damned thing into him to keep him at his best. That is our story—that is my story—. The book that he wrote last you know, everybody knows— Oh! There is really no use in concealing it from you further. My husband wrote 'Deepening Shadows'."

Dr. Newberry jumped from the chair.

"You do not mean to say that 'Deepening Shadows,' the book that has enchanted us all with its weird beauty, the book that has the Dusany touch in a way that is greater than anything has ever been; you don't mean to tell me that Henry Le Kler is your husband, and that this book, in all its beauty, was written under such circumstances?"

"That is exactly what I mean, Dr. Newberry. I know my husband. He can write a dozen novels as fine and better than 'The Deepening Shadows.' He has the latent ability, the potential mentality. The public needs his work, they need him. He has been the one clear clarion call in American literature during the last five years. *But we cannot keep on with the corkscrew.* Here it is. I am through with it. There must be some other way. Something must be possible to help him write without sending us down to the bottomless pit so that America can breathe the clear, pure air of Eternity in his writings. I want you to take this. When we are both dead you can tell the story—no one will believe you, but while we three are living, I want you to help us."

And here the woman tossed the corkscrew upon the Doctor's desk and sobbingly covered her face with her hands.

Dr. Newberry picked up the shining instrument. He held it almost reverently. Then he spoke softly.

"Mrs. Le Kler, this little corkscrew should be carefully preserved. In spite of its usual disreputable associations with alcoholics, this story of yours invests it with a greatness and a dignity that no similar corkscrew has ever had. Yet all your mental suffering and your husband's physical anguish were unnecessary. I will not say that. Perhaps had you come to me five years ago I would have smiled at your story and dismissed you without even trying to help you as I am going to try to help you today. Perhaps I needed the sharp stimulation of your tale, the realization that one of the most beautiful books in all literature was born in travail, not only of the soul, but also of the body. I am about to leap across the chasm and see something that no other physician has ever seen before; at least, not clearly. I feel that your husband will write again. He will continue to delight the American public with his fancy and the pathos of his beautiful prose, but never again will it be necessary for him to suffer as he has in the past."

No More Pain

● "You mean that you can help us?" asked the anxious woman, stretching out her arms in a gesture of relief.

"I believe so. You see, it was not really the pain that made him write."

"But we *know* that it was."

"No. The pain was simply a stimulating cause. What really produced the clearness of plot, the beauty of diction, the Dusany touch, was not the pain but the influence of the pain on the glands of internal secretion. Their hyperactivity was just sufficient to turn a writer who had mechanical technique, into an author who wrote as a bird sings in the blue of a summer morning."

"But it was the pain after all."

"Have it your own way. The pain is not necessary. Every day your husband's internal glands secrete just so much fluid. This passes into the blood stream and is carried to the brain. We are not sure, but perhaps the brain secretes a fluid of its own. We know that small portions of it, like the pituitary and the pineal, perform very important functions as far as the intelligence is concerned. I feel that the trouble with your husband is that he is secreting just a trifle less than he needs to be a great author. The pain stimulated these glands to greater activity, but as

soon as the stimulation ceased, they returned to their normal. Perhaps something like that occurs in all great authors, poets, and artists. Who knows? But I shall give your husband a medicine that is really the secretion of several glands."

"From human beings? Certainly that cannot be!"

"Of course not. These are from the glands of cows, sheep, and pigs, obtained in the slaughter houses of Chicago."

The woman shook her head. Hope faded out of her eyes.

"It will not do any good," she said. "You cannot make me believe that by swallowing parts of pigs and cows, my husband will write anything worth-while."

"I am not asking you to. Simply try it. Tell your husband that you saw me, and I ordered a tonic. Don't tell him of my conclusions. Get an automobile and roam over the country. Forget everything except that you love each other. Don't urge him to write, but before you leave, hide the Corona and some paper in the car. See what happens and then write me. I want to make you a present of this visit. Leave the corkscrew and the secret with me. I will guard them both carefully. Here is the prescription and your $25. Good luck and good-bye!"

A few days later, Henry Le Kler and his wife started off on a vagabond tour in a little Ford car. They had no particular place to go and were going there in the most roundabout way. They had but one idea, namely, to keep off the concrete and see the real country unspoiled by filling stations, billboards, and hot dog stands. For ten days they had a wonderful time, and three times a day the faithful wife gave the tonic and watched, rather hopelessly. On the tenth night they slept at a farmhouse, the paying guests of a friendly old couple who lived amid hayfields and apple trees. The night was warm and the moon full. At one in the morning the sleeping woman was roused by her husband's movements. Henry Le Kler was sitting up in bed.

"I feel funny, Mary," he said. "I cannot sleep. Things are happening in my head. If I had my typewriter with me, I believe I could write something worth-while."

The Doctor Takes His Own Medicine

● The wife went to the chair, put on her kimono, and lit a candle.

"You stay in bed, dear, and tell me about it, I'll write it in pencil. I have the old Corona and just loads of beautiful white paper in the little old Ford. When morning comes, you can write all you want to."

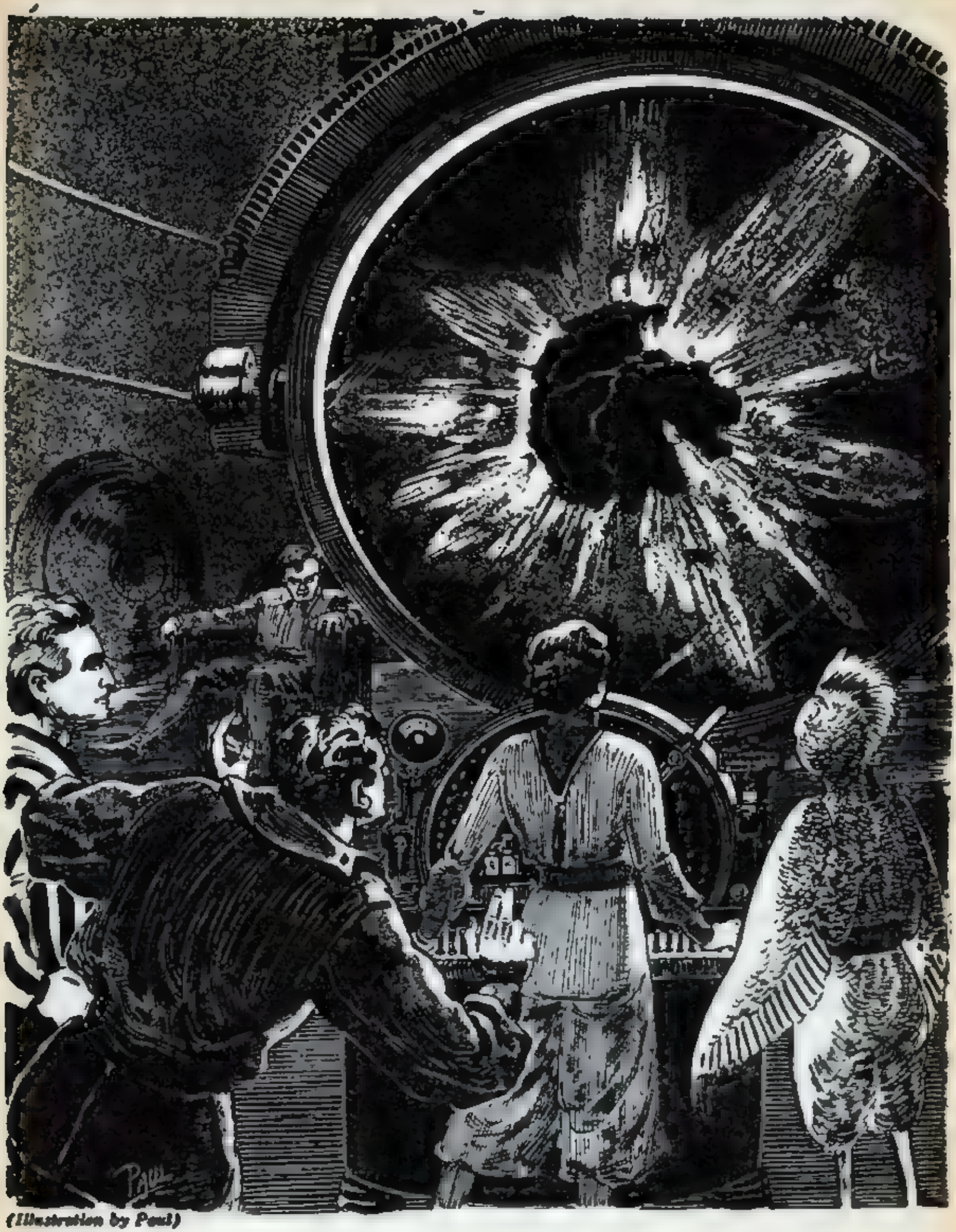
So, there in the candlelight and moonlight, he talked to her, hour after hour, till morning came, and as he talked, she wrote. At the breakfast table, they asked the old folks to let them stay a few days longer. They really stayed six weeks, and at the end of that time three hundred pages of manuscript were completed. During this time, the man wrote and ate and slept. The wife corrected, prayed, and did her best to feed him. Finally he wrote FINIS, dated it, and wrote his own peculiar colophon on the last page. Closing his typewriter, he looked at his wife as though awakening from a dream.

"I did it!" he exclaimed. "I did it and it was not necessary to—hurt me. Something happened to me and it was not caused by pain!"

"Perhaps you do not need the pain any more," she replied happily, but she did not tell him the story. She wanted him to have the pleasure of thinking that it was his ego, his soul, his peculiar *persona*, that had made this novel possible. Over the country roads they traveled back to ultra-civilization. The manuscript was handed, almost without comment, to the publishers of the 'Deepening Shadows.' Within three days that worthy made a personal call on the author and his wife. He was more than enthusiastic.

"You have done the impossible," he exclaimed. "We thought that you had reached your limit in 'Deepening Shadows', but in this new novel, 'Sign of the Burning Hart', you have done more than a little better. This book will not be one of the best sellers, it will be THE best

(Continued on page 917)



(Illustration by Paul)

Chaos sprang forth as rock and minerals spawned by some unknown, distant sun returned to their original vapor. A world was dead!

THE EXILE OF THE SKIES

By RICHARD VAUGHAN

PART THREE—Conclusion

WHAT HAS GONE BEFORE:

● The greatest scientific mind in the world, Knute Savary, who has given to the civilization of the twenty-third century most of the wonderful inventions and discoveries that it enjoys, suddenly decides to try to gain control of the governments of the world for unknown reasons. He destroys Chicago as a lesson to the peoples of the earth to let them know that he is invulnerable. He is betrayed, and his plans are destroyed. The World Council decides that he has given the world too much, and that he has too great an intellect to be sentenced to death for this greatest of all crimes. Their final decision is to exile him into space in his own space-ship which is a century ahead of all others in design, and which is equipped with "repellum," also his own discovery, which made the earth repel the ship the instant that it became activated, and would never allow the ship to land on earth again, although it might find a planet whose constituents had no effect on repellum. The vessel is filled with all the necessities and luxuries to last Knute for a century. Just before he is exiled into the skies, Knute says that Earth is doomed, but does not mention the reason why such should be the case.

One day his ship approaches an asteroid upon which he lands, to find evidences of a dead race below the surface in great caverns. He hears a scream and rescues a girl, when he returns to the surface, from some invisible horror. The girl had stowed away on his vessel, the *Victory*, and only came out after they had landed on Speira, the asteroid. She had betrayed Knute to the World Council, as she thought, for the world's own good. She had worked in his laboratory and had a very great mind for a woman. She was in love with Knute and followed him into exile. Knute is glad to have a scientific companion, but wishes it had been a man. Together, they peruse the records of the dead race of Speira, and learn that, in secret recesses, there are some inhabitants in suspended animation, who had been put in that state when Speira had had its atmosphere lost into space. Knute plans to bring Speira's atmosphere back and later try to return to earth to save it from the same fate, which was fast approaching. Knute and Nadja, the girl, rid the planetoid of the invisible creatures who had threatened their lives. Approaching another asteroid, they are drawn below the surface by the race of bird-men that live below under the crust, where they had taken refuge when the surface had lost its atmosphere. One of the bird-men, who are far ahead of us in scientific development, joins Knute and Nadja when they return to Speira to set up the solar-generators which will restore its atmosphere, and they take along many robots to aid in the construction of these monstrous affairs. Under the forceful cosmic rays of space, the acute mechanisms of the mechanical men are actuated and somehow endowed with life of the most elementary sort. They take the space-ship from Speira, but the telepathic efforts of the three powerful minds of the bird-man, Knute, and Nadja overcome the simple intellect of the robots, and they command the ship to be brought back to Speira, which is done.

● Here we have the enthralling conclusion to this tremendous interplanetary novel. We have seen Speira, an airless planetoid, revitalized with a breathable atmosphere and the first of her ageless sleepers revived. We have seen the animate robots thrown into space. We have seen the world of Sakka destroyed with its horde of ultra-dimensional horrors. We have seen the sages of Lydda who live within the bowels of their barren world content with their supreme knowledge. We have seen the fish-men of Marinoe and the reclaiming of some of their land which had almost entirely been submerged ages before, allowing them to develop properly on dry land. We have seen the terrors of Reinos—the predatory plants and the gigantic animal horrors, and the uniting of the two leading life-forms in an everlasting friendship. Savary, the greatest mind that ever lived, has acquainted us with all these creatures and created these miracles. There is but one problem to be solved. Can he save Earth from the airless doom that is the fate of all worlds? We shall see.

They decide to take no more chances, and the robots are destroyed.

The three adventurers, waiting for the solar-generators to store the energy they will need to accomplish their huge task, decide to visit two of the other important asteroids, Marinoe and Reinos. On Marinoe they find a race of fish-men for whom they create land by throwing part of the oceans into space, so that the fish-men can develop properly. On Reinos they find a world of vegetable and animal horrors—a primitive world from which they barely escape after uniting the two leading life-forms in eternal friendship. On this planetoid, Telzon, the bird-man, had received injuries which proved fatal. Knute and Nadja return to Speira, where they revive two of the sleeping inhabitants after the planetoid has a breathable atmosphere due to the action of the solar-generators. With the help of Saalvor and Ydrissa, the Speirans, they plan to bring to consciousness the rest of the inhabitants who had been in the state of suspended animation. *Now read the conclusion.*

CHAPTER XIII

The Things from the Black Moon

● Over the barren plateau of upper Thibet the cold flare of the indifferent stars brooded in a moonless sky. Only the little stratosphere-station marked the existence of Man on those night-ruled wastes. But no light gleamed from its closed window. The shadowy Himalayas on the remote horizon alone beheld the swift passage through that silent night of a great, gleaming cylinder from space and its quiet hovering over the unlit landing-field below. Its repellum-plated hull replaced with one of green and invulnerable vulcan, the *Victory* had returned to Earth.

Using the Lyddan force-beam as a brake, Nadja brought the arrowy spaceship to a gentle landing. She stood up with a heavy roll of metal-paper in her hand and looked longingly at Knute Savary who was staring with folded arms at the night-wrapped scene within the vision-plate.

"You are still decided, Knute?" she asked pleadingly. The man nodded, then placed an arm about her gently.

"Anything else is impossible, dear. Once this package is in the hands of the air-guard of this station, our duty towards Earth is done. Do you expect me to come back to humanity as one humbly suing for pardon? Or, at best, as one who brings a gift as earnest of future good-conduct? No, Nadja. Earth sent me forth to a spacial exile to ensure, past all peradventure, that I should never return. Shall I come back to her as a suppliant now? You may stay if you wish. Man has no quarrel with you. But as soon as my message is delivered, I return to the paths and adventures of space."

The girl sighed. To the suggestion that she should stay she did not even deign to reply. Leaving the room, she let herself out through the various airlocks till the firm terrestrial soil lay under her foot. A young half-clad air-guard had flung himself out of the small station and was standing staring at the frosty green bulk of the space-ship. He flung on his searchlight and found himself facing Nadja's auburn-haired, steel-bright beauty. She laid her roll of manuscripts and diagrams in his hand the while he stared, still speechless with astonishment.

"This is for the World Council . . . . in all haste. On your honor as an air-guard, take care of it . . . . the life of the world depends on it."

She had stepped back into the aperture of the narrow doorway. Her eyes swept the vague outlines of the night-ruled plains hungrily. Some strange sense of menace . . . . a something ominous in the darkening air . . . . struck through the emotion the touch of her own world's soil underfoot had stirred in her. She turned back to the man before her. "I am disobeying orders," she said quickly, half in a whisper, "but if Earth's need should ever become great, remember two words: the Asteroids. Perhaps they may help you."

The door clanged. Lieutenant Carl Gordon of stratosphere-station 478 saw the mighty cylinder before him lift skyward on some invisible propulsion till it hovered a hundred feet above his head. A long wash of flame and the well-known song of rocket-tubes seared across the cold, black sky. In a long streak of fire, the great ship sped out towards the frozen flares of the stars.

Within the silver and ebony room that had seen the pronouncement of Knute Savary's doom, oxygen tanks purred softly from their niches in the walls. Lewis Hart lifted a haggard, sleepless face from the pages softly dropping out of an electric transcriber at his elbow.

"The last Alpine Outpost has fallen," he said. "You can mark another all-black area on the map, Lu-Fein. Alaska reports dense blackness over the Bering Straits. Norway has been silent since noon. In the Amazon valley . . . . the air is thicker there . . . . we seem to be holding our own. They dread our atmospheric-vibrators."

The old Chinese leader laid one shaking hand on a heavy pile of papers in front of him. "You think this . . . . message . . . . is really authentic, Hart?"

The American president nodded. "Yes. It is unbelievable, but yet . . . . it is Knute Savary's writing and his style. We know that the *Victory* was built to withstand all the known hazards of space. Is it impossible after all for him to have reached us? Knowing the man, I do not think so. I believe that somehow, on some island of space, he has established himself and stripped his ship of the repellum that we plated on it."

There was a silence; then the Arab scientist who ruled the vast African state, laid one lean, brown hand on a glowing slab of Speiran opal-stone set before him. "This stone, at least, was mined on no earthly or lunar soil," he said decisively.

The European leader at his side brought one fist fiercely down on the table and cried out, "Then we must believe that Knute Savary has been within our reach. That the one man who could help us has touched our world . . . . and is gone!"

The old Celestial touched the transspacial message before him with a shaking hand. "We have no time for vain repinings," he said slowly. "One question only remains. Has this come in time to save Earth?"

The dark old Arab lifted heavy and fatalistic shoulders. "I fear not. Even if we could halt this loss of air under which our people die, it would solve only half our problems. And, with the surface of our world almost closed to us, the construction of machines such as are described in brief in Savary's first outline, may prove beyond our power. When Knute Savary wrote this he thought we had generations before us instead of . . . . *days.*"

His last word fell heavily onto the strained minds of the silent Council-chamber. Days! Could it be possible that humanity's future on Earth could be measured by these? The oxygen-tanks purred softly. Their presence was answer enough! Six years barely had sped since Knute Savary had been hurled into the infinite reaches of space, and already Earth lay gasping in the clutches of the cosmic death which he had foreseen. More! Even as the stricken planet panted and fought for its vanishing air, a ghastly, unnatural foe was hurling its foul battalions at it from the skies!

Even as Speira had perished half a million years ago, Earth was dying. Above her thinning air, a gibbous fragment of moon hung like a tattered corpse, and like some hideous shadow of its shattered sphere, a new, black globe floated by day over mankind's head and swung athwart the moon's broken shield by night.

● It was three years now since a spacial catastrophe such as even Savary had never dreamed of had set that sign of dissolution in Earth's thinning and darkening sky. Hurtling on some uncharted and erratic path, a dark and moon-sized wanderer from space had flung itself athwart the orbit of the Earth and crashed into the moon. For weeks, the skies had flamed with the stupendous spectacle of disrupting spheres, while Earth had cowered under the terrible repercussions of that unbelievable cosmic crash. Earthquakes and tidal waves, hurricanes and electrical, atmospheric convulsions had devastated the world. Then comparative calm had returned. The two stellar spheres . . . . or what remained of them . . . . had swung into twin orbits around the

shaken Earth. But, spurred on by the magnetic storms of that inter-lunar collision, the doom of airlessness, that already had brushed the world, had fastened on man's spacial home; its advance no more the slow one of lifetimes, but of months; and from the new, black satellite swaying in Man's invaded heavens, had poured a loathly, space-travelling foe.

Savary's gift and warning had come . . . . like a supreme irony . . . . three years too late. Humanity was fighting still, but half the population of the world was dead. Her sciences and knowledge were proving vain, but Man, however, had not faltered. Individual life had become a small thing now that the future of their race itself was at stake. The haggard faces of the seven World Leaders grew more somber at Hassan the Arab's words, but they did not blench. After a moment, Lu-Fein touched a bell at his side.

"Send the air-guard who brought this last message in," he ordered an attendant. A young man in the ragged remnants of the air-force service came in and saluted stiffly. In a drawn and hard-set face, dauntless eyes burned coldly. Mankind had risen to new heights before the challenge to its organic existence, and the air-guards were humanity's picked men. Lu-Fein spoke.

"You are Lieutenant Gordon?"

"Carl Gordon, Lieutenant, Stratosphere-station 478, upper-Thibet," the air-guard said briefly. The old Celestial nodded.

"The message you brought us is of very great value, Lieutenant Gordon. The Council gives you its grateful thanks. Will you give us any details not included in your report?"

The air-guard saluted again. "I was alone at the station, sir," he said. "My companion had been killed two days previously. I was taking my one-hour sleep-allowance in the oxygen room when a crash on the landing field outside woke me. I went out without taking time to put on a helmet. The Black Moon was obscuring the sky, but there was enough light from the ship's open hatchway for me to see a little. It filled the whole landing-field: a great, facetted cylinder, somewhat like our Martian space-ships in line but much vaster and of a metal I have never seen before . . . . a green metal with a frosty sheen. The woman who gave me that package there was young . . . . auburn hair and more than usually beautiful. She told me to give this to the World Council, then she added one thing more . . . . just two words, to be remembered if the Earth's need was ever great! 'The Asteroids.' That was all. She shut the door . . . . or rather it seemed to glide shut of itself, and the vessel lifted off the ground as though propelled by some invisible beam . . . . then it switched on its rockets and was gone in two minutes."

Lewis Hart looked at him keenly. "You are wounded?" he asked. One of the guard's arms was in a sling. The young man nodded briefly.

"Yes. The Caucasus is full of them. There are so few of us now that *they* have started leaking over the passes into Thibet. I had to come single-handed as soon as I could get replaced. The Pacific reports were bad, so I took the European route, but I ran into them in the upper Caucacus. The whole range was black with them."

"How did you get out?"

"My vibrators worked. They can't stand them . . . . it doesn't kill them, but it seems to get their nerve, like water on cats. They smashed in one of the front windows and one of their feelers touched my arm . . . . just a touch, but it felt like an iron girder crashing down on me. The doctors say I'll be able to use it again in a few weeks, however . . . . that I can still be counted on the fighting list. It's a good thing, for there aren't many of us left in our district."

"Or anywhere else," Hart commented wearily. "The Guards are bearing the brunt of the fight everywhere. How is the air in upper Thibet?"

The young Guard looked grim. "Half an hour without oxygen helmets is all we can stand . . . . even with the new progressive training. It's bad, sir."

Lu-Fein sighed abruptly and interrupted. "You may sit down, Lieutenant Gordon. I think you have earned the right to know that the message you risked your life to bring us may yet help us save the world. Show him Savary's letter, Hart."

While the dazed air-guard read the terse message of Knute Savary's note to the World-Council with a shaken composure, the European president exclaimed once more in a passionate undertone.

"If only we knew how to reach him! It is the bitterest irony; to have had the one man who might save Earth within our grasp and to know about it too late!"

Carl Gordon looked up with a sudden keen glance. He met Lewis Hart's eyes. "But would it have been of any avail to have known, sir?" he asked. "Would Knute Savary have stayed to help the world that exiled him into space?"

Hart said gravely: "He is a man whose mind is hard for us to judge, one who proved himself as great in evil as in good. But . . . . I think he would have stayed. Did he not cross, we know not what abysses of space, to warn us of and preserve us from Earth's approaching doom? He might enslave our planet if he did return, but he would come . . . . if it were possible to reach him, and that is a vain enough dream."

Rank had levelled itself greatly during mankind's common fight against destruction. Carl Gordon forgot about it as he swung on them all. Nor did they remind him of it.

"Not completely vain," he said. "After all, it is many years now since we have sent space-ships voyaging to Mars. Savary himself has proven that those airless abysses can be conquered. Give me leave to try to find him!"

Lu-Fein looked at him sadly. "Youth speaks," he said. "How will you find one man in all the immensities of space?"

The air-guard smiled. His head lifted proudly.

"My father was one of Knute Savary's most trusted engineers. He was pardoned . . . . with the others who fought with him against the world . . . . after the latter was exiled from Earth. He helped build and design the ship in which Savary was hurled into the void. He knows where the plans of it were secreted. When it was finished, only the designs of the still-incomplete parts were found. Build me such a ship . . . . put every man you can spare at the job . . . . and I will know towards what corner of space, at least, to turn its bow."

Lewis Hart leaned forward with a flash of interest in his eyes.

"Towards the Asteroids?" he asked.

"Yes. I had taken out my pilot's papers for the Martian air-route just before the Black Moon came. Give me my father as an engineer . . . . Savary's men were good men, sirs . . . . and I think I could bring a space-ship built on the lines of the *Victory* out to the Asteroids where I believe Savary has established himself. Once there we must depend on chance . . . . but can we afford to let one chance slip by us when Earth is perishing?"

The fire of his words woke a new energy in the wearied and aged veins of his listeners. So much impossible had happened to the bludgeoned Earth that nothing now seemed wholly so. The old Celestial spoke slowly.

"It is a faint chance indeed . . . . and one that would be worth nothing unless we can manage to build these revitalizers of which Savary speaks. Otherwise, before you could reach those distant planetoids and return, Earth will be no more than an airless tomb for Man. If the construction of these machines proves possible . . . ."

Lewis Hart banged a sudden fist down on the silver table. "It must be *made* possible," he exclaimed sternly. "We will build them in our underground refuges, piece by piece, and assemble them under cover of our vibrators. We cannot afford to fail when Earth is dying! Nor can we afford to neglect a chance . . . . however improbable. Show us the plans of Knute Savary's ship and your pilot's papers, Gordon, and even though the women and children toil with the rest, we will build you a vessel in which to cross space!"

The Alien Horror

● In the endless night of space, a speck of light took shape and moved. Across the icy panorama of the changeless, remote stars, the infinite proscenium of cosmic darkness, the sharp jet of rocket-flames seared sharply. Within the green hull of the *Victory*, returning to Speira laden with fruit and seed from Reinos, Nadja Savary paused as she bent over the vision-plate, and stared closer at that moving pin-prick of light.

Across a mighty gap of space, Carl Gordon lifted a taut hollowed-eyed face towards the grey-haired man at his side. Lewis Hart turned at his call. "The Asteroids are ahead of us," Gordon said. "My calculations were exact. Do you see those ten luminous dots ahead of us? In four hours we shall be on the fringe of that hurtling stream of tiny worlds."

Space had cradled them for weeks. Its pressure of endless, sun-lit night, of time that lapped them in a pulseless, tideless sea, had forged them anew. While their minds reeled from the star-sentinelled awfulness of that voiceless hurtling through the void, their spirits knew but one thought—the ever present goad of Earth's urgent need, before which they sped, crew and leaders as one, on that mad flight outward towards the sun's lesser children.

Suddenly Carl Gordon started, bent closer to the vision-plate, and stared. Across their bow, a pin-point of light moved across the starlit depths beyond. Catching Hart's arm, he pointed voicelessly. Even while the latter turned, the air-guard had leaped to the observatory . . . . built in imitation of the *Victory's* but equipped with only one small telescope . . . . and swung the telescope out towards that tiny dot of motion flashing across the unsentient void.

A minute later, a frantic call was tearing across the æon-old silence of cosmic night. Knute Savary, bending over the vision-plate beside Nadja, heard the low hum of the waking radiophone and switched it on. The staccato summons, hurled on a chance across space, beat desperately into the quiet room.

"Is that the *Victory?* Is that the *Victory?* Lewis Hart calling you, Savary! Lewis Hart calling you, Savary! Are you out there? Can you hear?"

Silence; then, across the spacial night, the incisiveness of a cold, clear voice winging through the void. "Knute Savary speaking. Brake with your bow-rockets. We will pick you up as soon as you draw closer."

Nadja looked at the vision-plate. "They are braking. I can see their bow-rockets. They should be close to us within fifteen minutes."

Savary said: "Pick them up with the Lyddan beam. I am braking faster than they can."

The radiophone hummed again, filled with Lewis Hart's voice, almost unrecognizably tense. "We are braking as fast as we can. We must reach you Savary. The Earth is dying . . . . you are our only hope!"

Savary swung on Nadja with a piercing glance. "How did they know where to find us?"

The girl paled a little but looked back steadily. "I told them . . . . at least I said two words more than your instructions when I gave the formula of the Vitalizers to the guard back on Earth. I was thinking less of you, Knute, than of Earth—of a possible future when she might need your genius. I told the Air-guard to remember two words against Earth's need: 'The Asteroids.' That was all."

Savary smiled a little. "Their need must have been great . . . . and it must have been on them even then. It is only two months and a half by earthly calendar since we have returned from that flight."

"Are you sorry that I told them?" Nadja asked anxiously.

Knute Savary shook his head. "If Earth needs me, I am glad to go. You were right and I, in my pride, was wrong, Nadja. They must have found the plans of the *Victory*. It is her twin that is drawing near to us now. Get into a space-suit

and be ready to grapple their ship to ours when I have drawn close to them."

His fingers brushed the control-board as he spoke. No more than a mile to one side, the smaller but otherwise identical earth-ship mirrored the cold gleam of the stars in her facetted, stelumin hull. Nadja could see the braking rockets sending out their wash of flame athwart her bow and the lidless stare of the stars as they watched this strange meeting in space. Suddenly, a slight shock ran through the *Victory's* hull. The invisible molecular beam of the Lyddans had reached out across the bottomless gap and fastened on the other ship. Locked invisibly together, the two vessels sped with still-flaming prows towards the hurtling stream of the Asteroids.

Savary leaned over the radiophone. "Turn off your rockets," he said. "We are grappling you with a new beam we possess. There are only two of us on board here, so have some of your crew ready to hook the ships together as we draw close. I suppose they are used to handling themselves in space by now? If they aren't, tell them to be careful not to slip and fall away from the ships. They'd be hard to get hold of again before their space-suit oxygen tanks were exhausted."

Slowly, the two ships closed in towards each other as Savary shortened the force-beam that held them attached. Half an hour later, Lewis Hart swung himself carefully across the gap that divided the grappled ships and followed Nadja's space-suited figure through the various air-locks. He stepped out of his own space-suit to find Knute Savary considering him sardonically. For a minute, both men looked each other silently in the eye. The roles in which they had last met were reversed and the judge was now the silent suppliant. Then Savary smiled and held out his hand.

"It is all right, Hart. We can meet as friends, even though we parted as judge and criminal. You were right when you exiled me. Tell me what danger that mankind cannot handle unaided menaces Earth. You got my message arming you against the growing loss of our world's atmosphere, I know . . . . otherwise you would not be here . . . . what other peril beyond the Council's power to handle has driven you out to these trackless reaches where hazard alone made us meet?"

● In brief, grim words, Hart told them of the cataclysm that had shattered the dead world of the moon and set a somber, alien satellite revolving in their terrestrial skies. He told them of the foul legions of invaders that were overwhelming the stricken globe. "At first," he said, "they came in small drifts that settled in dense blackness on the crests of our highest snow-peaks. Wherever they lighted, they spread a nightmare of darkness and a miasma that crept valley-ward and slew. The mountain villages and towns were the first to feel their deadly power. Since then they have over-run the Earth. Stelumin walls crumble beneath their tentacled weight. They float through the air like vapor and at times seem no more solid than summer mists, yet at a touch, the hull of our strongest stratosphere-ship becomes mere twisted fragments of metal and their massed weight can flatten a city out of existence."

Savary's brows met in a thoughtful frown. "What do they look like individually?"

Hart lifted despairing shoulders. "Like nothing ever imagined on Earth. Wherever they move, they bleed the surrounding air of its light like sucking vampires so that it is hard to distinguish them one from the other. A few have been seen separated from the rest by air-guards. Gordon, our pilot . . . . the man who is responsible for our being here . . . . says that they are like tiny summer clouds, formless and soft of outline but of a nightmare black. The only weapons that seem to affect them are your atmospheric-vibrators. At night too . . . . this alone allows us to circulate when needed on the surface . . . . they seem to grow sluggish and inclined to settle like swarming bees on the higher levels. Humanity . . . . or what is left of it . . . . has fled for

refuge to the old mines and prisons hurriedly put in commission by the Council. There the air is thicker and we can still bar the way against the Moon-Things with vibrators and granite walls. Only fighters remain on the earth's surface, save at places like the World-Buildings where great barrages of vibrators hold them off . . . . for the moment. Our scientists have striven in vain to find weapons that would destroy these creatures . . . . even more vainly to find means of arresting Earth's terrible loss of air. Now that is no longer a problem, thanks to the knowledge you bestowed on Earth, but our air is useless . . . . or nearly . . . . to us while these things possess our world. You are now our only hope."

Savary questioned Nadja with his eyes. She turned from a survey of the vast stellar chart set above the control-panel.

"We must land at Speira first, but we are only two hours off. They are waiting for the seeds and wild-fowl we are bringing them from Reinos. I think too that Ydraas, the Speiran whose mate died at her re-animation, would be happy to come with us. There is no mate for him on Speira and only adventure left."

"Speira is only two hours away," Savary said thoughtfully. He turned towards Hart. His eyes flashed. "Start back towards Earth. We will overtake you. Habit has inured us to accelerations beyond your power to endure. In three weeks we will be near Earth."

Four hours later, the earth-bound ship saw the hot flare of the *Victory's* rockets plow their bright furrow across spacial night. Swiftly, the seasoned ship of space overhauled them till a pin-point of flame was all that remained of her in the black gulf ahead. Within the control-room, the Speiran, Ydraas, and a wrinkled Older One from Lydda . . . . a cousin of Telzon, who had asked to accompany them on their flight to Earth's rescue . . . . divided the watches of the stellar night with Nadja, while Savary spent most of his time within the laboratory. While the space-ship fled like a loosed arrow towards her distant goal, the two vastly different Asteroid-beings spoke with the earth-girl of the distant planet that had given her life and o'er which the same death that had slain their worlds had already cast its shadow of airless doom.

The other space-ship had been left far in their rear. The tentacled sun grew daily in diameter as it flamed across their bow and their flight was measured by the growing spread of its fiery might. The unchanging rote of cosmic nights and days sped by, milestoned by the space-ship routine that already seemed to Nadja like the fabric of her whole life. Savary hardly appeared at all, and at moments it seemed to the girl-pilot navigating that pathless void, as though her solemn wedding within the great Lyddan Council Hall, when the feathered Older Ones had made her Knute Savary's wife, were no more than the figment of a dream.

The stream of the Asteroids became an invisible tide of worlds in their rear. Earth grew and brightened athwart their flight. Sometimes the monotony of that silent hurtling was broken by meteors that rose in pulseless swarms to pour across their path and pelt their broken fragments vainly against the smooth impregnability of their hull. Sometimes . . . . in a world as empty as it was soundless . . . . their only company was the wheeling stars swinging across the eternal dark.

At last, however, Mars rose, tinily spherical, on their left. Four days later, the Earth hung like a small round disc of light in the airless black ahead. Nadja called Savary from his laboratory when the broken fragments of the moon lifted from the sky before their path. The braking rockets were purring now against their bow and off in the illimitable night behind them, the pin-prick of flame that was their companion ship had swept into the telescope's range.

Nadja deflected the course of the space-ship so as to pass close to the riven ruin of Earth's once-fair satellite. A cosmic spectacle of destruction met their eyes. Nearly half the tiny world had been annihilated by that inconceivable collision in space. Like some scarred cadaver of the

void, the torn remains reeled by them as they sped. Beyond . . . . half-way between the moon and Earth . . . . the ominous darkness of the alien world interposed her shield between the silver fragment still reeling through the indifferent night and its parent orb. Nadja deflected the bow of the *Victory* to avoid passing too close. Not till they had learned more about this sinister invader of their solar system did they wish to challenge it directly.

● Swiftly, the jagged derelict of Earth's tributary fell away into space behind them, while the planet of their birth swayed like some bright jewel in the void ahead. Cloudless yet air-wrapped still, it glowed and pulsed across the gulf between them like an opal whose hues and shadings wove themselves into familiar patterns of continent and sea. The braking rockets flung long banners of flame ahead of them as they nosed into the fringes of her thinned atmosphere. Fearfully, Nadja swung the telescope down towards the remote surface and drew back aghast from the spectacle of desolation spread beneath them.

They had approached Earth on her nightward side on their last flying trip. Now she was revealed to them in the pitiless light of a barely tempered sun. They were sinking slowly through the tenuous air . . . . air that was darkling blue and palely starlit like Speira's first atmosphere . . . . and the panorama of half their world was clear to their eyes. Everywhere the spectacle of bleached, parching soil and dead or perishing vegetation met their appalled glances.

"It is even as Speira was before our sleep," Ydraas said sadly, and Zonlor looked with pity at the whitened faces of the two terrestrials as they contemplated their dying world.

Where white snows had gleamed cleanly on sky-reaching mountain tops, black shadows lay and spread towards the lower levels like the festering sores of some foul illness. Elsewhere forests lay withered, their leafage sear and dried. Plains stretched their desiccated levels in brown, endless desert miles. Empty riverbeds traced sun-baked ravines between deserted shores. Only the ruins of one-time towns remained to mark the sites of once-flourishing lands, but off to one side, the sparkle of the Northern Pacific drew their eyes gratefully. There was water still on the parching Earth . . . . water that still could sparkle and laugh in a dying world. Savary sank the space-ship towards it and spoke between clenched teeth.

"Every mountain range is blotted out . . . . see? Their black pock-marks cover half Asia and all South America. Alaska and the Scandinavian nations have vanished . . . . all Europe's central mountain system is submerged. It looks like a plague-stricken world."

Nadja swept a somber gaze over the approaching plains of western North America. "There are the walls of the World-Building rising intact in the distance," she said. "Here Man still rules! Look, Knute! See that spear of crackling blue light rising through the thin air? It's a neutron-beam! They have managed to build one revitalizing machine at least!"

Savary looked down at the pale gleam rising upward to tap the sun.

"We must make them turn it off before we can land," he said. His voice rang through the radiophone, echoing around the world that had exiled him six years ago. In the Council Room where hollow-eyed, haggard men still battled for the life of the Earth, the radio-receivers filled with that unexpected call. "Knute Savary speaking! This is Knute Savary speaking. I am landing before the World-Building. Turn your solar-machine off."

Like a message of hope, the great green cylinder floated above the embattled walls of the World Government edifices. Orders flashed forth from the Council and men in oxygen-helmets ran out to switch off the blue, stabbing spears of the neutron-beam. Slowly the *Victory* sank down through the deep blue air, flashing the sunlight off her many-facetted hull.

Slowly she came to rest upon the soil that had sent her forth to an eternal exile.

In the silver and ebony room in which he had once stood before his judges, Knute Savary faced the worn guardians of the world. After a silence weightier by far than words, Lu-Fein spoke with dignity.

"It seems a miracle that Carl Gordon should have found you amid the labyrinths of stellar space. We had hoped little of his flight in search of you. That you are here shows he has succeeded in achieving the nearly impossible. Knute Savary, we who cast you forth to the awfulness of an eternal spacial exile, call on you now to save Earth in her final extremity. That you have come shows there is no need for more words. Our planet is perishing .... even the two revitalizers we have been able, at great effort, to construct from your plans and instructions, have barely sufficed to slow down our atmospheric loss, and one of them has already been destroyed by a night attack of our foe. Only a handful of humanity remains. Tomorrow, if nothing intervenes, Earth will be even as the moon, a spacial corpse haunted by ultra-terrestrial ghouls, where only the crumbling effigies of our race remain. We have turned to you in our final despair .... having already accepted gratefully the gift of possible air from your hands. Is there anything you can do to save us?"

All eyes were fixed on the still figure before them. This man had departed on his awful plunge into space, a Titan who overshadowed all Earth; he had culled from space and the vastness of cosmic ways and perils an even greater power. His glance swept the great maps that frescoed the walls on either side and grew somber as he saw how little of the world there was left to save. Then it flashed over the tense, waiting faces of Earth's leaders.

"I have come to try," he said quietly. "The *Victory* has acquired new and mighty weapons in her rangings of the Asteroids and I have added others before which even your strange invaders may quail. Lewis Hart and Gordon are close behind me. A strange chance allowed our ships' paths to cross each other in remote space. Now, tell me what you know of these Things with which you battle?"

The Chinese president lifted hopeless shoulders.

"Nearly nothing, save that they are blacker than pitch and of a substance and law unknown to our world. They pour in constantly increasing streams across the void between their world and ours and overwhelm all but our mightiest defences. Since Hart's departure, all civilians have fled below the surface, but their fantastic weight has broken down the walls of some of our caves and tunnels, slaying all within. In our deepest underground mines and prisons the women and children are still safe. On the surface, only one or two g o v e r n m e n t quarters like this .... manned by picked air-guards .... dispute with them the complete possession of our world."

Savary turned his deep gaze on the swarthy Arabian scientist .... the most erudite of the seven world presidents.

"Hassan, what do you think of them?"

● The Arab president lifted keen black eyes. "I think that they represent matter capable of condensing itself or vaporizing itself at will. As to their weight .... we know that there are in space bodies smaller than our Earth yet possessing densities greater than our sun. These Things parallel this composition, so great is the disproportion between their terrible weight when condensed and their size. At their vaporized largest, they seem no bigger than small clouds .... condensed, when they shoot out strange tentacles and are impossible to perceive as individual units .... they must be less than half that size. Yet the density of one alone can break a man's bones like twigs at a touch. I have speculated as to whether they may not have originated with their planetoid near that satellite of Sirius whose density is so enormous in proportion to its size. All that we know of them is that they absorb light rays and create a complete darkness wherever they are. Their pres-

ence apparently exudes radiations harmful to man, for people have died simply from their approach. When they first settled on the higher Alpine peaks, their black canopies seemed to be the center of strange and violent magnetic storms that appeared to coincide in some fashion with the increase in the speed with which our atmosphere seemed to be leaking away from us. A perusal of your explanation of planetary air-loss has given me the idea that they, or their moon, might possess the faculty of sucking the magnetic fields of a planet dry, as it were. This would explain the vast stimulation that has occurred in our loss of air since they came."

Savary's eyes flashed the approval of one scientist to another.

"Thank you, Hassan; your ideas are helpful. I think I know of a weapon that these Things will fear. But there are substances of which I will give you the formulas that I will need to have made. How many men can you put on the job? Time is our enemy just now."

Lu-Fein lifted his old head proudly. "Every man, woman, and child left in our underground refuges. All humanity is fighting for the survival of its world. We built Gordon's space-ship in two weeks and the solar-machines in six. If needed, we can pump an extra allowance of synthetic air into the caverns that we have transformed into workshops of sorts. Thank God! As long as there is still water left on Earth, we possess the means of obtaining oxygen at need. The old and infirm will do with less air . . . . even though they die from it . . . . that the others may work more strongly for humanity's salvation. Tell us what you want and if human hands and human minds can achieve it, it will be done."

Savary inclined his head. "Hassan, will you take charge of the work? Get the best scientists left alive and the foremost chemists, also every engineering expert you possess. Hart told me that Carl Gordon's father was once one of my men . . . . I remember him as a good one. Put him in charge of the engineering work. I want three weeks' work done in as many days, if possible. To assist you, I will give you a member of my crew. He is a Lyddan scientist. His world is one of the many tiny planets whirling in the Asteroidal belt. He will teach your workers the use of the Lyddan force-beam belt with which one man can do the work of ten. In other ways too, you will find him helpful. He belongs to a civilization as far ahead of ours as ours is ahead of Neolithic Man."

He paused and surveyed the Council. "I think that we will conquer. In space, I . . . . and Nadja Manners, the woman who betrayed my fortress to you long ago, who saved Earth from my ambition, only to hide on board the *Victory* that I might not go alone into the unknown ways of space . . . . Nadja Manners and I encountered and defeated beings as unnatural as these. In three days, or as soon as my ship is equipped with the weapons I need, I will make a trial attack on them where they are thickest. Can you tell me where that is?"

The South American president leaped to his feet, his dark, Castilian face blazing with a fire that belied his age. He had accomplished his arduous duties throughout three years that well might have broken younger men, had seen an awful death obliterate nine-tenths of his people, his sons fall in the air-guards' ranks, without losing the haughty composure of a Chilean aristocrat. But the prospect of revenge broke down his studied serenity. He pointed to the maps etched on the walls.

"Look! No continent has suffered as much as South America. Outside the Amazon valley, no human being lives where millions teemed before. They have crushed the towns of the west coast out of existence, covered the Andes from Central America to the Cape with their sable pall. Attack them in their Andean fastnesses, Knute Savary . . . . and take me with you to see them die!"

Savary met his eyes with a grave sympathy.

"Come, if you wish. It is unimportant to say that we may perish. If we do, remember, Lu-Fein, that there are other

worlds in space. Humanity need not die with its planetary home. Amid the Asteroids there are new, young worlds where Man's seed may prosper. In ships like the *Victory*, space itself is a home. But Earth is not yet dead. If she is to die, Nadja Manners and I will die with her! We have crossed the gulf between the Asteroids and are here to save her . . . . or perish in the attempt!"

CHAPTER XIV

A Trip to the Black Moon

● Nadja Savary swung the vision-plate down towards the slaty-blue of the wide Pacific, and said, "It is growing darker."

A vague twilight seemed to hang over the sea—not the clear loss of light of day's ending, but a murky thickening of the air as though a storm was near. The pale stars that pricked the dark blue of the sky even in full daylight had disappeared behind an impalpable veil. Carl Gordon left his seat before one of the new weapons that Savary had added to the mighty array of the space-ship and bent over the vision-plate beside him.

"That is always the first sign of the Things," he said. "Long before one reaches the place where they hover, the air grows slowly darker as though they fed on the surrounding light, draining it away."

Ramoneda moved restlessly. "What if the hull does not hold up?" he asked. "We shall not have time even to try our new weapons. Even stelumin is not strong enough to withstand the infernal weight of these creatures when they condense."

The beautiful Speiran in charge of another of the hurriedly-added weapons turned and spoke from his seat. "But this ship is not walled with stelumin. Speiran vulcan fashions its hull and not even the weight of these Moon-Things can bend *that*."

The space-ship lifted higher. For a minute, the dwindling waters of the distant ocean stretched for leagues on either hand. New islands lifted in all directions and long reefs split the combers where fathoms of water had rolled a few years back, but still the dancing motion of the blue waves kept something of the world that Nadja had known. Now, however, they were dimming under this strange draining away of the daylight around them. Zonlor, the wizened Lyddan, who sat with a calm interest in his eyes at Ydraas' side, sent his thoughts across to the girl at the controls.

"There is a kind of mental miasma thickening around us," he told her. "These beings must possess little mind . . . . unless theirs is a Mind that diverges so much from all known formulas of our solar system as to be incomprehensible to ours. There are no thought waves perceptible in the pressure I feel growing around us . . . . only vibrations of primitive emotions such as hate and lust and hunger that must be their mass mentality impinging upon ours."

Nadja nodded. She too had felt the growing unrest in the psychic tides around them. Her face as she bent over the control-board was unusually grave and pale. Here was no bright conflict of strange perils and hazards such as they had known amid those distant, tiny worlds which they had left at the call of Earth. There, only their own lives were in pawn to failure or success, while here the fate of their planet . . . . all the future of their condemned race . . . . rested on the outcome of the vast struggle towards which they sped.

She looked at Savary who had just filled a test tube from the murky air without. A new sternness sat upon his face. Three days of watching Mankind living like cowed rabbits within the warrens where they had fled, of looking out upon a world that was marked already with the seal of planetary death, of hearing the tales of wholesale destruction and cosmic horror under which humanity was melting away, had set this look of icy grimness over the still power of his face. On the strength of the vulcan hull around them and the power of weapons still untried, depended all the future of Man. If they

failed, Earth must die, must become, as Speira had been, a frozen corpse spinning for airless eternities through unsentient space. For, unless the Black Things were conquered, of what use would the neutron-rays be? Sooner or later, the weight of the trans-stellar foe would break in the walls and doorways of the underground refuges humanity had found in its need, and the miasma of their presence would seep where their tentacles could not reach to exterminate the stubborn survivors of Earth's once-ruling breed.

Nadja shook herself sharply. Such thoughts were poor preparation for battle.

"Look, Ramoneda," she said, looking downward into the tilted vision-plate, "it is getting night-dark below now. How far do you think we are from these Things?"

The Chilean president stopped his nervous pacing. His face set grimly. "A few minutes more and we should touch their outer fringes. The Peruvian coast-line . . . . only there is no more a Peru . . . . is only some fifty miles distant. This that we see is only the shadow they cast. It is so heavy that often the Things are unseen till their foul masses overflow around one."

Savary came in from his laboratory. The cold power of his glance swept around the room. "There are traces of alien substances in the air-sample I have taken," he said quietly, "substances which respond to no analysis or test of Earth but whose emanations are clearly hostile to organic life such as we know it on our planet. Perhaps, later, I may be able to discover some chemical element that will prove noxious to these creatures' systems, but for the moment, we have other things to do."

He took Nadja's place and looked into the vision-plate. Below was a dense and murky night. The long billows of the Pacific were no more than shadows of motion in the Stygian depths above which they sped. The air itself seemed less the hue of night than the deepening negation of all light. Blackness, intense and terrible, was closing in and wrapping them in its unnatural embrace.

Gordon tilted the secondary vision-plate at his end of the room till it framed the darkness immediately ahead of them. He barked a warning.

"Look out! We are among them."

They were plunging into an inferno of abysmal night. Around them swirled soft puffs of vapor, multitudes of things no larger than the light clouds of a summer's day, but of a black so deadly that they hit the human eye like a blow. Beyond them opened vistas of unfathomed night . . . . pitch-black perspectives that extended before them like the gates to some indescribable hell. "They are only just waking to our presence," Nadja said quietly. "Strange and unnamable emotions are pressing in on us."

Ydraas the Speiran looked across at Savary curiously. "They create a darkness that beggars that of space," he said. "Are they other-dimensional foes, O earth-man, like the icy luminosities that fed, as vultures feed, on our death-throes ere we sank into the sleep?"

Savary uttered a swift negation. "No. They are of our plane . . . . otherwise their weight would not affect us. I feel that they are clinging to us now. The speed of the ship is slowing perceptibly."

Soft shudders indeed were running through the slowing ship. Along the outer shell, strange feelers were brushing and tightening, clinging and growing each moment heavier. Ramoneda and Carl Gordon's faces whitened and their lips set. They alone knew by experience what an encounter with these invaders of Earth could be like. Nadja looked at the speed indicator.

"We have ceased to move," she said.

● Below and around them pressed a living night; a night whose mile-deep thickness swirled in invisible coils that settled like condensing, molten metal around the ship. Savary switched off the useless rockets and a strange silence fell on the varied group within the control room. The faint lights above the various

instrument boards cast odd and eerie glows. All others had been switched off. Within the large square of the vision-plate, the complete annihilation of all light acted like a material oppression on the straining eyes. Horror filtered in through the optic nerves and settled like a vise on the slowing pulse. A miasma as heavy as the darkness without seemed to seep into and settle in the tense room.

Eyes turned repeatedly on Knute Savary as he sat impassively before the wide control panel. He answered their silent question after a moment.

"We will use the new weapons in a moment. First, I want to make sure of the strength of our hull. Let them try their full weight against us."

The stillness grew more and more unbearable. They felt the sense of immense weight slowly condensing and closing upon the motionless ship increase with every pulse-beat. Carl Gordon relieved the tension by speaking quietly to Nadja. "This is the feeling that the neighborhood of these Things always spreads . . . . a growing numbness of the mind," he said, "a sense of lethargy and strange horror."

Savary turned. "The feeling you describe, and which we have now, is self-created," he told them. "These creatures have no hypnotic powers other than the purely involuntary one caused by the reactions of our organism against theirs. The human eye is one of the chief gateways to the mind and the total absence of all light which these creatures create or embody represents a sort of sensory vacuum . . . . a violent negation of the optic nerve's purpose, so unnatural as to react on the brain."

He stopped as the control room shivered under the tentacled weight fastened around them. The vision-plate showed no more swirlings of moving vapor, nothing but a solid wall of impenetrable black.

"It is like being imprisoned in the heart of some immense atom," Nadja said in a low voice.

Savary nodded. "The walls seem to be holding. They cannot break vulcan. Now that we know that, we can fight!"

There had been only place on the control-board of the *Victory* for the directing dials of two of the four new weapons added to the mighty space-ship's equipment. These Savary touched, aiming them at right angles to the ship by a twirl of their dials. A strange resonant purr seemed to pour itself backward from the outer air-locks where the weapons themselves were installed. Nadja looked frightened but Savary smiled.

"That is only the machinery itself getting under way," he said. "The insulation laid on the ship under Hassan's supervision preserves us from feeling the vibrations we are sending out against them."

Around them, the black densities were shuddering and their shudders ran through the ship. The throb of strange engines grew louder and louder but not as loud, Nadja knew, as the crescendo of terrible sound-vibrations that was pouring out against the locked solidity of the foe. All eyes were glued on the lifted vision-plate. Without, the frequencies of the sound vibrations quickened to a beat imagined so far only on paper, but now, for the first time, achieved. Out of an old knowledge of Earth's scientists, Savary had constructed a weapon of molecular-rending power. Its terrible rhythm sank irresistible fangs into the solidified matter imprisoning the terrestrial ship. The wall of impenetrable black flung across the vision-plate began to have the sense of spreading molecules, still more of a feeling than anything perceptible to the eye. Suddenly, Nadja uttered an exclamation of triumph. A thin streak of somber grey tore across the inky field!

Savary smiled thinly. "It works!" he said. His eye flashed a message to Ydraas and Gordon. Their vibrators hurled two additional streams of deadly vibrations into the vaporizing foe. Ramoneda swung dazedly on Zonlor.

"But what, exactly, is happening?" he queried. The Lyddan answered him in grave, measured thoughts. Nevertheless, his skull feathers were ruffling with interest as his eyes watched the grey streaks

etched across the vision-plate widen and grow.

"The sound-vibrators are disrupting their molecular composition. If Savary had not found a substance whose composition I do not yet know, capable of interposing an absolute shield between us and the vibrations we are hurling forth, our own molecules would likewise be dissolving under the power of sound stepped up to unimaginable rhythms. Even on your young planet, I see in your mind that the possibilities of sound-vibration have long been known but never exploited. On Lydda also, our inertia prevented our scientists from ever evolving a machine capable of creating the sound frequencies which we knew as mathematical possibilities. In any case, without the shielding substance which Savary has created and which he calls 'isolatorum,' its lethal power would have been impossible to use. Old as we of Lydda are in knowledge, this mind your childish race has produced is beyond us, for he has the power of translating thought into material creation which we are fast losing."

The old Chilean looked at the vision-plate with eager eyes. It showed faint washes of light, or rather, not light itself, but a faint memory of its lost and distant ghost, that sifted in somber smears through the disrupting night in which they were embedded.

Now, a sense of other-specie panic, of untranslatable suffering and disarray began to beat in against the more finely attuned psychic nerves of Nadja and the old bird-man. The voiceless cry of matter vibrating to a rhythm of dissolution which they could not understand ached through their minds. Around them, the depths of that infinite blackness dilated into no less Stygian but less oppressive clouds and whorls of swirling, vaporized jet. The Moon-Things had ceased to condense their savage weight around the space-ship. Instead, they were expanding in terror, thinning out in vast billows, many miles in depth, through which the destroying sound-rhythms played with a less immediate power.

● Nadja flung on the rocket-power experimentally and the released ship began to fight its way upward out of the tides of the dissolving Things that held them.

Up and up they rose towards some infinitely remote surface, while around them eddied a continual sense of vaporous motion which the eye felt rather than saw. Unplumbed depths of lightless, milling matter clung or yielded or clotted suddenly around the more and more swiftly speeding craft. They were like a dust-mote tossed within the pitch-black heart of a storm cloud of titanic size, a grain of matter whirling upwards past the currents of an ocean of unbelievable night, but the pressure on their hull had ceased. Like a wan and frightened ghost, light began to sift down through the darkness thinning around them. They floated all of a sudden in a murky twilight where all luminosity, even the hot flare of their rockets, seemed to drown and drain away like water on desert sands. A visibility of sorts called on their protesting eyes to resume their functions. They saw Nadja swing the vision-plate downward and beheld at a vast distance beneath them, the blurring hemisphere of the earth barred by the profound swath of pitch-black that was the engulfed Andean chain, and blurred to its farthest horizons by the sable shadows that lapped .... like tidal fringes .... the deadly core of the Things.

Carl Gordon exclaimed triumphantly. Even from this elevation, the sound-vibrators were hurling Earth's first successful challenge at her other constellation foes. Beneath them, inky depths were breaking and dissolving and distant washes of grey gave outline to the milling legions of the invaders. A peak of the Andes stabbed upward through the violent sea of jet, only to crumble .... mute witness to the power of sound made lethal ... at a chance touch of Ydraas' vibrator. Savary sank the space-ship lower and the sky dimmed to a renewed vault of swimming night. Around them moved once more the vast whorls of

molten jet, now closing in on the *Victory* as it sped with death-dealing fangs among them, now thinning in terror till they were like the clouds of some vaporized inferno of the void. Beneath them, mile-deep ranks of fused and fleeing foes formed horrible depths where light died and darkness dug pits of appalling blackness into which the human mind seemed to plunge and sink and lose itself. Fluctuations of black against still profounder black, of waves of semi-solid night spreading out and upward into fleeing spirals of jet, of tide below tide of an indescribable violence of darkness, combined to shatter the stability of nerve and thought used to the daily gift of light. Zonlor spoke in a shaken, mental whisper.

"They have never known fear before . . . . all their mental vibrations are shaken by this new sense of terror and danger."

Savary bent keen eyes over the vision-plate. Experimentally, he reached for a switch and the brilliant searchlights of the space-ship flashed outward like golden spears. An exclamation sprang from the Chilean president's lips. As the mighty spears of gold leaped forth towards the black vapors around them, they vanished like mists in the sun. The infinite sea of molten jet amid which they sped seemed to drink up their stabbing brilliance and drown it in their unfathomable depths. Savary uttered a short, satisfied exclamation. He switched them off and said:

"I am going to try the disintegrators on them. Against their more impenetrable state of a little while ago they would have been useless. It represents a solidity beside which all that we know by that name is nearly malleable, a solidity infinitely more impregnable than vulcan against which the disintegrators have already proven vain. Now that they are vaporized, however, it may destroy them. The vibrators are growing too slow as these Things expand."

Carl Gordon looked at the great vision-plate. He saw the broad fans of the disintegrators sweep out like sheafs of loosened arrows of pale light against the whorls of vaporized jet . . . . sweep and annihilate! Like the strokes of some giant broom, they dissolved the thin vapors of the billowing foe — now cutting swaths thousands of feet deep through the league-long ranks that hid the day, now leaping back in showers of blinding sparks from the unconquerable density of some still unvaporized clot.

His pulses were racing triumphantly. For long, he and the old South-American president had known the death and defeat, the constant crumbling of Earth's strongest defenses and wholesale annihilation of entire cities which these foul battalions around them had inflicted on their world. His teeth clicked savagely as he saw them meet at last weapons against which they were as blindly helpless as Earth had been before their poisonous power. Ydraas heard him mutter elatedly: "Take that, you hell-brood! I hope some of you were the Things that killed Harry and Joe and good old Pete!"

The Speiran looked across at him with a flash of sympathy. "Though a thousand of your race die daily, still it is the death of your nearest comrades that bites deepest," he said. "These men were your friends?"

Gordon nodded. "Air-guards. Eight thousand Guards have been killed since the Black Moon came—four times our complete roll-call. But millions have died amid the civilian populations before their remnants took refuge underground. In South America alone, the Brazilian cities in the inner Amazon valley are the only fortifications that still hold out."

The Speiran nodded slowly. "It is bitter . . . . in one's springtime of life, to watch the dying struggles of one's specie and one's world. We have much in common, earth-man. I, too, have seen the blight of cosmic death beat down upon the planet of my youth.

But you are lucky . . . . you will see it lift and withdraw. Knute Savary will save Earth. If he fails . . . . and such a being does not fail . . . . you will at least be free to die with your world, not wake

to the loneliness of another, remote day that must be ever haunted for you by the bitter memories of a distant, unreclaimable past."

Willing Sacrifice

● The young air-guard turned a friendly glance towards the grave beauty of the Speiran. He extended a hand. "Tomorrow we may all be dead," he said. "But if we live . . . . and conquer . . . . you need not lack one friend of today who will seek to lessen the weight of your strange loneliness. Since your mate has died and you are not needed on Speira, you can adventure through space with me or stay on Earth awhile. Perhaps you can find a mate among our terrestrial girls and bring her back to your own world."

Ydraas pressed his hand. "I accept your friendship. We two could find interesting adventures among the worlds of our system . . . . but only if Speira has no need of me. But we are planning while your world is yet in peril."

They looked once more at the vision-plate. The night swirling against it was riddled now with long slashes of leaden grey, while here and there the showering brightness of the back-flung rays played like a spray of flame. Savary swung the *Victory* in a wide curve, for his calculations indicated that they were near the end of the Andean chain, and hurled her back along her death-dealing path.

"They must possess some controllable power of repulsion from the Earth's surface to permit them to remain in the air even when they condense to their full weight. The power of controllable molecular expansion and contraction is one we never thought could be exerted at will, but these creatures clearly possess it, as well as the power of fusing their individual bodies into homogeneous masses. I wonder what the system from which they have come is like? For the moment, however, we are defeating them, but even if we destroy all those now infesting Earth, we shall have gained little unless we stop their influx at its source. The only way to free our planet of them is to follow them to their own world and destroy their entire brood."

Ydraas broke the moment's silence. None had blenched before the audacity of the thought, but he alone laughed. He flung back the bronze hair curling over the grave perfection of his forehead and his eyes flashed.

"Truly, you have called me back to a life well worth living . . . . however brief it may prove to be, Earth-one," he said. "When shall we leave for this alien satellite?"

Savary looked at him gravely. "I have no right to ask you or Zonlor to accompany me on such a venture. Perhaps all that we may hope to do will be to free Earth before we ourselves are slain. If you wish to stay on Earth, the space-ship which Carl Gordon piloted in search of us can return you safely to your own worlds. A venture such as lies ahead of us is too desperate for any but terrestrials to undertake. We go to save our world . . . . but yours await you unthreatened in space."

Zonlor answered for both ultra-terrestrials. His thoughts reached out calmly as though this that he discussed was of only academic interest. "Speira owes you life itself and Lydda the hope of a renewed planetary life. Your world is our world, and if we die for it, it is well. Death in any case is nothing, and there should be interesting knowledge to glean on a world that could spawn such creatures as these."

Neither the Chilean nor Carl Gordon said anything. Like Savary and the slim girl who fought at his side, they were Earth-people. Whatever death they went to mattered not as long as it would save their perishing race.

Savary said quietly: "Earth will not forget." After a moment's silence he added: "When we have worked as much destruction as we can here, we will return to the World-Buildings to give to them the news that a weapon has been found that will defeat these Things and to prepare for the attempt we must make. We must have stronger weapons. Those we

have now are good enough for a skirmish such as this, but they are not enough for an attack on a world. When we destroyed the *Nerea,* we had one weapon that was invincible against them. Against these Things we have nothing as instantly destructive. Moreover, we need to be doubly strong, for within their blanketing hold, we lose all means of replenishing our solarpower. Luckily, our reserves can last us for weeks, otherwise an attack directed against their own world would be virtually suicide. Moreover, we need to be fully prepared, since we cannot afford to fail. If we do, Earth is doomed. At very best, she will become an outwardly lifeless corpse like Lydda, holding life only within its kernel, and Mankind will live on sufferance on the planet of which it was lord."

Nadja interrupted the silence. Fearlessly, her eyes flashed over the grimly tensed group. "We shall not fail! These Things have already discovered that Humanity has found weapons before which they must fly."

Without, the great disintegrators still swept their vast arc through the dissolving tides of black. It was clear enough now for them to see a great mass of condensed darkness meet the waves of a sound-vibrator that Savary flung against it and crumble slowly . . . . edges blurring and shifting . . . . into a rain of impalpable powder that sifted down through the dense billows eddying below. They looked down and saw the stripped Andean summits breaking through the dissolving black that had blanketed them for so long, peak after peak upthrusting through that seemingly limitless sea of molten jet, like imprisoned things struggling to get free. Above them, a vast canopy of sickening night was mounting and spreading, wavering away into the dimly perceived sky.

But the hordes they battled with were drawing countless millions to them as they died. From Panama to the Cape, the teeming tides of the Things were flowing and converging towards the seat of the turmoil they dealt. Rising for a moment above the billowing conflict, the crew of the space-ship beheld, through the dim twilight of the upper air, the limitless, turgid billowings of that continent-long pall of black as it whirled and surged northward towards the destruction they were dealing. Save for the stabbing summits tearing through that dissolving flood below, the most distant vistas of the earth beneath them were blanketed from view by that eddying immensity of unrelieved black.

Once more they sank into the heart of the battle. For endless hours it seemed, they hurled the alternating forces of the disintegrators and the sound-vibrators at the sable tides that milled around them. Their awful blackness beat in like blows against their protesting eyes, while the two less seasoned of that mixed-planetary crew, Gordon and the old Castilian, felt their minds reel and wander through nightmare mazes as that other-world turmoil eddied endlessly around them.

Suddenly the girl cried out sharply. She had turned her eyes once more to the vision-plate after a moment's rest from its swirling chaos of Stygian death. Now, leaning forward abruptly, she laid her hand on Savary's arm.

"Knute! Look! They are thickening around us . . . . it is they who are attacking now. Look what they are doing!"

● In an immense and whirling funnel of jet, the Things were leaving Earth. Like bones bared by a withdrawing horde of vultures . . . . bones gnawed clean and bare by these vapor-horrors of the void . . . . the arid crests of the Andes slipped one by one out of the Lethean night that had ruled them. Far below, the blue Pacific slowly crawled from the murk that had drowned its light. In a mile-thick column . . . . a whorl of profound night . . . . the creatures that had ruled the Andes were flowing up and up into the darkening sky; and at their heart. . . . cupped in a vast funnel made by their swirling departure . . . . the *Victory* was being lifted farther and farther from the released Earth.

Savary's hand clamped down on the rocket-tubes and the white-hot blaze of rockets shot out across that Stygian scene. After a moment's intolerable trembling, the space-ship leaped blindly ahead, slowed like a car plowing through thickening mud, then shuddered to a quivering stop as the Things in renewed numbers condensed around her. The Speiran uttered a shout of horror as his eyes lifted to the vision-plate. Around them spread a weird sea of pale flame as the disintegrator-rays were flung back on themselves in one immense, converging tide by the closing circle of the condensing foe. Savary's hand leaped out to the controlling switches, tripping them at lightning speed. Gordon and Ramoneda released their caught breath, but Nadja smiled a little.

"You forgot that our hull is of vulcan and proof against even the disintegrators, Ydraas," she remarked. Carl Gordon answered before the Speiran.

"But we do not know if the case is likewise for the isolator substance. If it were stripped from our hull, we would be powerless to use the sound-vibrators."

Savary nodded his assent to the point made. His eyes were fixed on the utter blackness now muffling the vision-plate.

"Turn on the vibrators," he ordered. "We are being carried higher and higher without volition of our own. With the foe as dense as this, the rockets are useless. Outside of this ring of immense weight which they have flung around us, their millions are probably whirling upward in vapor form, carrying those who hold us with them. Things of this solidity could not otherwise move so fast. It is the first concerted defense they have offered to our slaughter of them."

Once more every vibrator flung its intolerable rhythm at the tightened molecular prison that held them fast. But now a concerted plan of action seemed, as Savary had said, to impel the Things with a sacrificial discipline. As fast as the faint, grey washes that indicated a disruption of the vise-like walls appeared within the vision-plate, other tides of condensing creatures flung themselves into the breaches. Savary flung on the rockets once more but only a vast shudder running through the mighty ship answered their burst of flame.

"But why aren't the sound-vibrators working like they did before?" Ramoneda exclaimed . . . . appalled at this sudden turn from victory to apparent helplessness.

Savary didn't look up from his tense attitude over the control-board, but the old Lyddan, Zonlor, turned to the terrestrial and thought calmly:

"The vibrators are killing them . . . . but too slowly for our need. That is their weakness . . . . a weakness Savary foresaw, but which the creatures without have only just discovered. They can replace the walls we shatter as quickly as we break them down. Some Things of higher mentality are directing their course now."

"But where are they bringing us?"

Savary switched off the rocket-tubes abruptly and rose. He answered for the Lyddan. "Probably to their moon. Zonlor is right. The disintegrators cannot work against them when they are condensed and the sound-vibrators are too slow to be able to break down their walls faster than they can rebuild them. The flight we intended to take to their own world is being imposed on us well before we are ready for it. However, I have hopes that most of their kindred on Earth have joined them in their exodus. It must take myriads of them to be able to replace their imprisoning walls as fast as we disrupt them."

"What can we do?" Ydraas asked.

Savary looked at the speed-indicator and shrugged.

"Nothing for the moment. We are already beyond the limits of our stratosphere. In any case, we have a certain margin of time ahead of us. At this rate of speed, we shall take close to a week to reach their planetoid. Meanwhile, our sound-vibrators will be destroying them by the thousands. We had better use only two at a time. When we reach their moon, we shall need all our weapons. Nadja, I am going to hand the command of the

ship back to you. Call me if anything untoward develops. Otherwise, I do not want to be disturbed till we reach our goal. I am taking some food-tablets into the laboratory with me so that you need not worry yourself about me. There is only a week ahead of us, and before we reach these creatures' world, we must find ourselves other and stronger fangs."

Nadja turned from the vision-plate and said: "Wait. Look below, Knute."

Below them, a rift had occurred as some momentarily thin wall of the moon-creatures melted for a moment under the rhythms of the vibrators. Far, far below . . . . distance dimming its hues and diminishing even its lordliest peaks . . . . the earth was sinking away into the embraces of space. For a brief moment, they viewed her hemispheres spread before them as she rotated in the unsentient void, and saw that from every visible mountain range, great columns of living, intense black were pouring upward as though to join and feed the immense funnel that whirled around them, with the solid, clinging walls of their prison at its core.

"They are leaving the world," Nadja cried triumphantly. The view blurred. Once more the in-pressing night of their molecular prison wrapped them close, shivering back from the atom-rending bite of the vibrators, yet ever renewing itself. Savary smiled gaily.

"Even if we perish, we have at least given Earth a respite; a respite in which they can build more revitalizers and strengthen their defenses. One thing only I regret: that we cannot get a message through to the World-Council telling them that the sound-vibrators work, so that they may equip themselves with them against these Things."

● Nadja swung around on him. "We can," she said. "Do you remember across what leagues of empty space Telzon and you and I reached and compelled the minds of the rebellious robots? With Zonlor's help, we can reach Earth with our minds."

Savary consulted the old Lyddan with his eyes. The latter inclined his feathered head. "Your Older Ones have good minds . . . . there should be no impossibility in reaching them even though they are unfamiliar with thought-transmission. Matter . . . . however dense . . . . cannot interrupt the radiations of thought, and our three minds are very powerful."

Savary flung himself into a seat beside Nadja. His hand touched hers. A glow ran through her, for it was a brief lover's caress snatched from the abstraction of their epic struggle for Earth's life. He spoke briefly.

"Lu-Fein will be on duty in the inner Council Room at this time, will he not, Ramoneda?" Only half comprehending, the Chilean president nodded. Next moment, when he would have spoken, the Speiran leaned forward and touched his arm, motioning him to silence. The faces of the three in front of him had become blind windows shuttered against the world. With pulses slowing, and with shallow, almost cataleptic breath, they were flinging the impalpable vibrations of their united minds against the entombing substance that had locked itself once more around them.

Within the silver and ebony room countless leagues away, Lu-Fein felt the slow prying of eerie fingers plucking and calling to his mind. Like a noose tightening, the current of space-bridging thought slowly knotted itself around his waking and answering brain. Words began to filter into his mind. Winging through matter beyond the scope of man, past an ever-widening abyss of space, they slowly formed sentences which galvanized him to strained attention. Word by word, the message from the distant captive *Victory* moved mysteriously across the void. It ended and there was a brief silence, then Savary's thought vibrated within his own once more. "That is all. We are going, I think, to their moon. We shall try to conquer them . . . . if we fail, remember that we died willingly in the service of Earth."

He stopped; the mind of Zonlor pulsed alone across the void.

"Remember, too, O Earth-leader, that it will be Lydda's pride to feel that one of her race died in the service of Knute Savary's world."

Another mind followed his across the widening gap, Ydraas'. His race was no stranger to thought-transmission. "And Speira gladly gives a life that the planet of Knute Savary may live."

The thread was broken. Somewhere above the shrunken air-envelope of the beleaguered Earth, the *Victory* and its small and strangely assorted crew were whirling upward into a spacial night far less black than the vortex of the dying, yet ever-replaced Things that carried them. Within the still Council Chamber, Lu-Fein, looking old and shaken, sat staring at the transcribed message hurled at him across that vast, airless gap.

CHAPTER XV

The Red World

Within the space-ship, Time lapsed into the monotonous rhythm of self-enforced sleep and waking. Ydraas and Ramoneda and Gordon worked under Nadja's directions at the task of overhauling and testing in every way, the vast array of weapons on the great space-ship. When this was done, they watched the meaningless hours march foolishly around the face of the time-recorders, while the distances ticked off on the speed-register, while ever the terrible blackness of the foe pressed in against the vision-plate holding them rigidly immovable within the constricted vortex of its dying but constantly renewed heart.

Savary remained locked within his laboratory. Once Nadja went in to help him test the tensile strength of a blended alloy of stelumin and vulcan, and saw the marks of sleepless vigils on his hollow-eyed face. Meanwhile, the dark stream that bore them flashed ever upward through the hidden skies. From Earth, that black pillar, rising as an apex to many smaller ones, seemed a solid bridge of Stygian night slowly swinging across the abyss between Earth and the threatening bulk of the Black Moon. Barring the starlit skies by day and night, its shadow lay like a dread threat across the watching world, but within its constricting heart, dissolution slowly spread and gnawed, as the long cylinder of uncrushable metal it carried exacted a merciless toll for every hour of spacial flight that it traveled.

At last . . . . Nadja had marked the course of six days on the time-board . . . . that mad pouring of solid matter through the airless void seemed to slow and falter. The speed indicator hovered and almost stopped. Savary came out from his laboratory at Nadja's call and looked over the tense group in the control-room with eyes that were hollow and burning from lack of sleep. He cast a glance at the speed-indicator and nodded.

"Six days," he said. "I thought they would take about that time. Now we shall see what kind of a world these creatures come from. Nadja, you stay at the controls. Zonlor, Ydraas, Gordon, Ramoneda, will you assist me in dismantling, within the quickest possible time, four of the heat-guns, and in installing new weapons in their place? They will have to be connected directly with the solar-power reservoirs as they have no motive power of their own like the other weapons. In any case, their consumption of power is so immense that we must use them only in the last extremity. I regret that, with the time and the materials at my disposal, I could not discover any more practical methods of offense . . . . but an analysis of the slight traces of alien substances which I managed to strain out of the atmospheric sample I procured, shows them to be of some totally unknown atomic composition almost invulnerable to any poison of Earth. Save in an emergency, we shall have to depend on our vibrators and disintegrator rays."

For a while, as they toiled at desperate speed, that ominous immobility in space persisted, like the lull before the storm. Nadja and Ramoneda were standing at the controls, looking eagerly at the dead-blackness of the vision-plate, when

they began, once more, to move. A shiver seemed to run through the prisoned ship, as the grip of the solidified Things vaporized around it. Then the indicator on the dial set to show any deviations from the space-vessel's straight route during space-flying, began to revolve at an appalling speed. Spinning like a top, the *Victory* leaped upward as the great column of the Moon-Things swirled ahead in a mighty, rotating jet.

Across the viewless vision-plate, the dead-black melted before a low, red glare. Even as Savary hurried back into the control-room from a final inspection of his new weapons, the vortex that held them fast opened like some foul, unfolding flower, whirling them downward towards a vast surface of viscous inky liquid that glowed with the sultry, reflected glare of some invisible light. As they dropped closer, Savary uttered a low exclamation.

"A world of liquid gases!" he said. "They must be instinct with some inner super-cold of their own, or the approach they have made to our sun would have volatilized them."

They sank still lower towards that ominous, glaucous world. Suddenly, the girl cried out. Savary and she were staring down at a sight comparable to the opening doors of Hell. Beneath them, the floor of the black planetoid had opened in a vast fissure that split the tides of liquid gases from pole to pole. Like some gigantic wound torn by Titan hands in the alien world's flanks, it lifted jagged ramparts of torn and twisted débris high into the sky, while from its unplumbed depths poured forth a constant, pulsing glow of almost purplish red . . . . a sultry, crimson flare, without flame or flash, that bathed the head of the great streamer of the returning Things like some vaporous life blood, as they circled and spread and hovered over this ominous gateway to their home.

Ydraas laughed a little drily. He turned to Carl Gordon. "We are flowing towards it. If that is the reflected glow of some internal fire, I think we are near our end. Even if the vulcan walls could resist the temperatures that live at the core of a world, we will all be incinerated alive within our triple hull."

The air-guard's lips set thinly. "Nevertheless, we may be able to do them some damage before we die," he said evenly.

Savary was staring down at the nearing abyss with intent eyes. Like aimless, wounded birds, the leaders of the great column of fleeing Things were palpitating around their world. Nearer and nearer it drew, till the full immensity of the chasm torn in the dark planetoid's side was revealed to them. As long as the small sphere itself, it measured at least a hundred miles from wall to wall, and the tortured pinnacles, lifting in grotesque shapes above it, were as lofty as the highest mountain of Earth.

"This must be the token left by its collision with our own moon," Nadja said. Savary nodded. Over his shoulder, without taking his eyes off the sight below, he gave a sharp order.

"Everyone to his place. See that both the stimulating cachets and acceleration pills are ready to your hand."

● Now the great, jagged cleft was opening its glowing jaws immediately beneath their keel. Still circling in the whirling hold of the black vortex that bore them, they sank closer and closer to that weird, all-pervading glow; a glow, which, strangely, the black legions seemed to have no power to dim or intercept. Leaning over the down-bent vision-plate, those on the *Victory* saw a spectacle of infernal magnificence frame itself beneath their descending craft. Like the open jaws of some fabulous monster, an endless abyss of sullen light was engulfing the foremost battalions of the moon-things, drawing them down and down to still ruddier vistas, where their vaporous outlines melted and vanished around some vastly remote bend. Immediately to their left, the torn and twisted ramparts of the red gulf reared to titanic heights, holding back . . . . like some vast, tortured dam . . . . the sluggish and ominous

wash of the liquid gases forming the surface of this world.

Beyond the dull reflection of lurid red pouring from that appalling cleft, their sluggish, oily-looking waves melted away into intense darkness, while the seamed bastions holding them back lifted black and shining surfaces, nearly as Stygian in hue as the creatures that poured themselves past their jagged peaks, whirling frantically . . . . no more than half as numerous as when they left Earth . . . . down towards the sanctuary of the world that had spawned them.

Circling in smaller and smaller rings, like a boat nearing the heart of a whirlpool, the space-ship spun down towards that awful gap. Now the high walls of the abyss's edge loomed above their heads. Around them, the vast width of the glowing chasm was filled with the vaporous legions of their foe. Savary noted that most of them seemed to have expanded to their thinnest vapor-form, and gave a sharp command. Out from the space-vessel swept the almost invisible sparkle of the disintegrators. The stricken ranks of Stygian black around them melted forthwith in great, clean-swept swaths. Out to the walls of the chasm, the terrible rays flamed in annihilating waves. As they touched the glowing cliffs, long streaks of darker red sprang out across their flame-washed surface; sprang and widened like ripples around a flung stone. Eating inward, the rays cut pits and caverns out of the jet-like substance that was the rock of this new world. The Stygian millions of the foe pulsed in a whirling horror. After the terrors of the sudden collision with the terrestrial moon, another threat of destruction was attacking their world! They faltered and began to condense into their most invulnerable form, but Savary's hand was on the levers of the rocket-tubes. Before they could solidify, the rockets flared in a brilliant burst of flame across the somber red of the surrounding glow. Leaping ahead of the vanguard of the foe, the space-ship swept . . . . not up and outward, but down . . . . into the dread chasm whose ominous aspect seemed like a prognostication of doom and where they must die or conquer if Earth was to be saved.

The old Chilean . . . . the only one not inured to spacial acceleration . . . . reeled under the impact of their vertiginous flight. Nadja caught him as he was about to collapse and poured a strong dose of restorative down his throat. When he could speak, he said weakly: "I feel that I am the only useless member of your crew, and that I should apologize for having come."

Nadja helped him to a couch. They were still flashing down at an indescribable speed into the heart of the Black Moon. Suddenly she felt the slight jar of the braking rockets. Leaving Ramoneda, she turned to the vision-plate to see the vast arch of the chasm open beneath them into a realm of strange brilliance. A moment and they were past it. The braking rockets purred to a halt. They were floating in a vast hollow whose limits could not be perceived. A tiny dot of alien matter washed by the waves of a strange and fluctuant sea of deep crimson light which spread above and beneath and around them without material boundaries, as though they hovered in an element without beginning or end.

Everywhere amid the tides of the turgid glow around them swirled the countless eddies and angry vapors of myriads of jet-black Things. The light in which they swam and floated came from nowhere, or rather from everywhere. It poured through the heart of this subterranean world from no delimitable source . . . . . an unfocused radiation that filled the limitless hollow with a shadeless, yet living and pulsing ebb and flow of hostile power. Into that deep wash of light, the nearly checked flame of their bow rockets was sucked away like water draining into sand. They looked downward, but only the dull crimson of the swimming light met their eyes. Upward, the shadows of the world-long cleft stretched in infinite vistas of somber red, beyond the reach of mortal glance, and everywhere, in circling streamers and billows and drifts of pro-

found night, floated the vaporous eddies of their alien foe.

As he pulled himself to his feet to look at this strange world, the Chilean president saw the ruddy glow from without reflect itself suddenly on the tense faces of his companions. An exclamation tore itself from his throat as he turned his eyes aside and beheld the three-fold thick walls of the space-ship apparently melting away before his appalled glance, leaving them to float seemingly unprotected and unveiled in the midst of that thronging inferno of countless, pulsing billions of vapor-foe.

For a moment, scarcely more, the faces of the remote and reflective-eyed Lyddan, of the ethereally beautiful Speiran, of Carl Gordon's taut, resolute pallor, was flooded with that ominous glow. Then Savary's hands reached out for the light-switch, and darkness swept around them, while, once more, the triple walls that fended them from their foes closed around them safely. Over his shoulder, Savary spoke reassuringly.

"That light generates heat of a sort, but not enough to fuse our plating or seriously incommode us. I think that these Things live on light and can absorb it only when vaporized. This is their habitat and this light is probably their source of nourishment. Perhaps they come from a cold, dark solar system, insufficiently lighted or illumined not at all by whatever sun they possess, and this made the surface of their planet uninhabitable. I think it probable that they had no knowledge of the exterior of their world till the collision with our moon tore it open and sent them out to their first taste of our solar-rays. Whatever this light they live on is made of, it can evidently penetrate even such compact substances as vulcan, but when I switched off our own lights, its interest in us ceased. Before that it was piercing our walls with its unknown power, only to drink up our light-vibrations as quickly as they were produced. You may have noticed that our lights were dimming?—even as our searchlights had done when we turned them on these Things on Earth. At the time, this gave me an idea. What we have just seen confirms it. At least now, we know something of these creatures who were feeding so happily on the sunlight of our sphere!"

His tone changed, became incisive. "And now that we know something about them . . . . we can fight!"

● The disintegrators had been switched off in their mad acceleration down the abyss overhead. Now they stabbed out in a circle of destruction before which the somber, unwarned legions of the vapor-Things swirling everywhere around them, reeled. But now, from the gaping chasm that slit the roof of this world came pouring the vanguard of the great column they had outdistanced, while . . . . as if in answer to a voiceless cry for help . . . . the remote reaches of that endless hollow began to empty their tides of Stygian creatures towards the vortex that whirled around the flaming *Victory*. Surrounded by her belt of destroying rays, the space-ship so audaciously challenging the unknown might of a world, floated in an inferno woven of live vapors of crowding, swirling black, and washes of somber crimson that glowed with a malignant fire. Around them, the Stygian Things whirled in closing, perishing circles, while beyond and through and around them, the lurid glow beat down on the daring, green cylinder like the visible hate of an alien world.

Suddenly, the disintegrators began to hurl their pale radiance against a more impervious foe. For miles around, the molecules of the Moon-Creatures were condensing and contracting like the circles of a semi-solid whirlpool. Every minute they were opposing to the destructive rays a more and more resistant front. Sparks began to cascade back from the closing walls and Nadja saw Savary's face grow grim. She bent over the vision-plate by his side. The red glow had vanished . . . . blotted out behind immeasurable depths of solidifying substance . . . . and even as Savary switched the disintegrators off and gave the signal for all the sound-vi-

brators to be flung on, she read the misgivings in his mind. Here was a pressure beside which even the terrible weight of the massed Things on Earth was as nothing. Around the vulcan shell of the space-ship, the countless, infinite hordes of a whole world were pressing and closing with a weight beyond the computation of Man.

For a moment, as the death of the sound-vibrators struck out at them, the solid wall already closed around the space-ship crumbled and sifted into powdery dust. Then a slow tremor shook the prisoned craft. In that darkness, which only the lights above the instrument-boards relieved, they heard the ominous, grinding sound of straining metal. Hurrying into a space-suit, Gordon made his way into the exterior air-locks and sent back a shout of frantic warning through the dial-phone. At half a dozen places, the outer wall of vulcan was buckling inward under a pressure which only the bones of a planet could have resisted. Savary's mouth clamped a little tighter. The clotted Things—backed by the incalculable pressure of all their species . . . . had found the joint of the *Victory's* armor.

"The weight behind them has forced them in between the outlets of the sound-vibrators," he said grimly. "The *Victory* is caught between veritable spearheads of impossibly resistant matter. They are grinding inward under the pressure of weight beyond our understanding. The slowness of the sound-vibrators was one of our weaknesses; the fact that we had not enough of them to completely cover our hull is another one I had hoped these creatures would fail to discover."

Again a great shudder ran through the tortured ship. Even vulcan could not resist forever the spearheads of ultra-terrestrial substance grinding in on her with a weight that could have pierced a planetoid through. "What are we to do?" Ydraas cried hoarsely. "We can't use the disintegrators and the sound-vibrators are too slow to save us!"

Another and another tremor shook the buckling hull. In the outer compartment of the *Victory*, Gordon saw the space-proof walls bulge slowly inward as the straining metal fought against unconquerable odds. Behind each vise of immeasurable weight lay the league-deep pressure of a vengeful world. Slowly, the mighty walls sagged and groaned. He flung one more frantic warning into the wall phone at his side, then turned to face the death that in a moment would overwhelm them all.

Savary's hand hovered over the switches releasing the four new weapons, but Nadja acted suddenly. Her arm flashed above the glow of the dial board, and a lever swung down. The most antiquated of all the space-ship's equipment . . . . the great heat-guns that had exterminated the Nerea of Sakka . . . . flamed into life.

Hurling itself from every pore of the space-craft, the white-hot flame of the released guns met the atomic wall locked around them. Fire . . . . checked at its outlet by an impenetrable molecular dam . . . . was prevented from flowing back on itself by the pressure of pouring flame behind it.

"They will destroy us!" Zonlor thought. "In a moment, the gun-tubes themselves must give way . . . . or the hull fuse!"

But Savary had seized the thought in Nadja's mind. Tensely, he held his hand away from the dial-board, waiting . . . . risking everything on the chance she had seen and played for; played for rightly! Before either hull or weapon tubes could succumb to the awful duel between matter and pure heat, the oppressed walls felt a slight retraction of the unnamable weight around them. In the infinitesimal space granted them, the flaming tide flattened and spread like a sheet of living fire, and as it spread . . . . changing the *Victory* from a mere cylinder of metal to a white-hot thing of pure flame . . . . the ring that held the space-ship in its appalling clutch began slowly to dissolve along its inner surface. In the outer air-lock of the *Victory*, the air-guard saw death falter as the compressed hull relaxed. The

great vulcan plates cast and fused on distant Lydda, ceased to shudder under that inhuman hold. Dragging his numbed mind back from the acceptance of death, Carl Gordon turned towards the wall-phone at his side.

"The pressure is relieved! The walls are holding!" he cried.

Savary's eyes met Nadja's in a deep flash. Her mind had outspeeded his for one brief moment and had saved their lives . . . . for a while at least. As she sped out to verify the damage done, Ramoneda wiped the sweat that had, despite his haughty courage, dampened his forehead.

"But why does the heat-ray affect them when they are impervious to the disintegrators?" he asked in a shaken voice.

Out of Power

● Savary looked at the vision-plate. It showed white washes of terrific flame as the heat-rays coursed within the widening margin left between the hull and the solidified Things. He spoke briefly.

"They are vaporizing so as to absorb the light of the heat-rays . . . . for the heat itself they care nothing. It would take something near the heat of the sun to melt a substance such as theirs. But light is their food . . . . this is the complete proof of it. Nadja thought of that when she switched on the heat-guns, and saved our lives."

"But living matter cannot eat and obtain nourishment from light!" Ydraas ejaculated.

Savary remarked: "Not terrestrial matter . . . . but who knows even a fraction of the laws which rule our own system alone? As a matter of fact, creatures that live on light represent an order not so far from our comprehension as we may, at first, think. Organisms that live almost exclusively on air exist on our world. The human frame itself draws nourishment from the sunlight. From that to organisms that feed exclusively on light-radiations is only a short step for the scientific mind."

"Do you think that light is their only food?" Zonlor thought curiously.

"Food is only a form of speech . . . . it is their source of energy, like our food, but the method by which they absorb it may not resemble our own manner of eating. No. I think that they draw into themselves at least one other form of radiation. The new weapons I constructed for an emergency are based on this belief."

Nadja came back to the control room at this moment, followed by Carl Gordon. "The walls are intact and they seem to be vaporizing," she said. "I slipped back the observatory's outer roof long enough to notice that there were streaks of dark red visible through the black."

For a few minutes, there was only the throb of the sound-vibrators sending their disrupting rhythms into the densities still pressing around them in the lightless control-room. Silently, the dauntless crew over whose lives death's fingers had so nearly closed, weighed the value of the respite they had just won from the destruction that they hardly hoped to finally escape. What chance, after all, had this solitary space-ship . . . . powerful though it be . . . . amid all the known horrors and still unknown hazards of this trans-stellar derelict of space? Only to Savary and Nadja . . . . veterans of other spacial conflicts hardly more deadly than this one . . . . did death seem a not wholly foregone conclusion.

Ramoneda broke the silence by speaking slowly. "Our death would matter little if only we could make these creatures pay dearly enough in exchange for them to leave Earth unmolested till her air-envelope be gathered around her once more. But your death, Savary, may be a greater price than Earth can afford to pay for a mere respite. With you alive, other weapons for wholly destroying these Things could be evolved . . . . other conquests of them would be possible. Your mind would serve as a shield against further cosmic menaces. I wish you were not with us and exposed to the same dangers of annihilation."

Savary shrugged. "If Earth is saved,

she can evolve other minds. Neither are we dead . . . . yet. In any case, if we die, we shall see that we take enough of the denizens of this world with us to ensure their never troubling Earth again. I have set a sort of detonator . . . . it is really a mixture of chemicals that react violently against the traces of these Things' substance which I managed to procure . . . . which . . . . at the first rupture of our hull and the consequent penetration of the outer atmosphere . . . . will explode the chemical contents of my laboratory and change the *Victory* into a bursting bomb of such lethal power as may well disrupt even these creatures' alien, molecular composition. But that is only the last weapon. For the moment, we are still well fanged. I think that most of the Things around us have volatilized sufficiently to let us tear ourselves away from their hold. I am going to give them the disintegrators at the same time as the rockets."

Beyond the admixture of Stygian darkness and the white flame of the heat-guns, long washes of lurid red were filtering in as the ranks of the Black Moon Things, indifferent in their voraciousness to the death still being dealt them by the vibrators, vaporized gluttonously to feed on the new, white-hot brilliance that was being bestowed upon them. Suddenly, the terrible disintegrators replaced the flaming rays of heat. The volatilized ranks of the league-deep legions palpitating around them melted in mighty swaths. The stricken myriads swirled in a panic as blind as that which had fastened on the Things besieging Earth. As they eddied in dissolving clouds of jet around the lethal fans of pale radiance, the rocket-tubes belched out their blasts of fire. Upward through leagues on leagues of the whirling, palpitating vapors, the *Victory* hurled her flashing length of metal on its liberated course. Past semi-clotted peaks and pillars of the Moon-Things; strange travesties of the cloud-mountains of Earth done in deepest black; through infinite reaches of billowing, jet vapors . . . . unmeasured depths that seemed, for a time, to have no end . . . . they flashed in an upward slant till, suddenly, they were free; free and hurtling across the enormous caverned home of the invaders of Earth.

Before Savary could brake that mad acceleration, all sign of the vast chasm down which they had come had vanished in their rear. They sped alone in the endless washes of the lurid light, their myriad foe left far behind. A vast and empty world pulsing with the dull glow of that untraceable luminosity, surrounded their silent flight. For a moment, only the flare of their braking rockets kept them company in that shadowless sea of light, then Ydraas uttered an ejaculation as he glanced at the vision-plate. Like water vaporizing in the sun, the white-hot brilliance of the rocket flares was being sucked away into some remote reaches of that all-pervading glow. Savary turned on the mighty heat-guns and saw the same phenomena repeat itself. Zonlor moved to his side and spoke curiously. "An entire world that feeds on light! Here are natural laws the like of which we have never heard of . . . . even in all the long records of our scientific history."

Savary switched off the rockets that were bearing them away from the lost egress of the Inner World. They floated almost motionless in the still intensity of that unreal glare. Suddenly, Nadja exclaimed: "They are coming after us!"

● Against the red light that filled the horizonless world, the dead-black tides of the Things were pouring upward in billows of molten jet. But these were no such fusing and eddying masses, no barely individual conglomeration of pugnaciously stupid matter. Enormous and tentacled, with pseudopod outshoots of fluctuating jet, each one was a distinct and individual entity pulsing with an ambience of ultra-human hate. Heavy with menace and a dread sense of power, they mounted in slow, circling attacks, in rapidly contracting whorls that blurred the penetrating crimson of their habitat's luminosity and flung Lethean shadows across the vision-plate.

Nadja felt a horrible, gross tide of uninterpretable violence sweep like waves across her psychic senses. "These are not like the others!" she cried softly. "They have minds or something that are beating out a message! Zonlor, what is it that they generate?"

The old Lyddan's mental composure was shaken. The current of his thoughts vibrated under an unusual emotion.

"Hate and triumph," he answered. "These are the servitors of some power they worship or obey . . . . . priests or attendants of something for which they covet us as food. The whole air is full of the foul vibrations of their hate!"

The black floor below had become mountains of threatening vapor looming on every hand. Each individual pitch-black cloud writhed with immense tentacles of condensed might. The disintegrators swept out towards them with a lethal flare, but the Things expanded like lightning, thinning out to an impalpable vapor, more tenuous than anything their weaker kindred could achieve. Soon, they were no more than vague shadows of motion drifting ever closer across the red washes of their underworld light. They drew nearer and nearer.

"Half the disintegrator-rays are being lost in the spaces between their expanded molecules," Savary said grimly.

He flung on the heat-guns, but the slowly enfolding tides of the mounting vapor-foe disdained their trap. Impervious to the flames around them, dying, but only in comparatively small numbers under the pale fans of the disintegrators, they billowed upward around the floating ship. The solidified tentacles reached out, writhing with the suppleness of feelers despite their density, and met the full blast of the sound-vibrators that Ydraas had . . . . at Savary's nod . . . . flung on.

A few of the strange feelers melted away into powdery dust, but others grew out of the still vaporous bodies and swathed themselves around and around the death-hurling ship. At an incredible speed, the tenuous mists solidified to black units of appalling weight. Soft slipping sounds whispered and moved along the outer-hull as tentacle after tentacle wove an unbreakable net around the fighting ship. The vision-plate darkened, but not wholly as when they were locked in the solid density of the fused Other-Things. Through the twining, tentacled net, dark smears of sultry red continued to burn from some far-distant space. They could see the swaths of dissolution melt and play through the close-packed, yet individual masses clotted around them, but still the imponderable weight of the prisoning feelers wrapped themselves around the vulcan hull. Then, the space-ship gave a lurch and began to move without volition of its own. Slowly, they were being borne down into the invisible vistas of the luminous world.

Under Savary's hands, the *Victory* became a spitting monster of death-dealing rays. Swaths of impalpable mists vanished under the stabs of the disintegrators. Crumbled dust of that trans-stellar solidity sank in a constant shower into the fathomless ocean of fluctuating crimson through which they fell, but, ever reforming itself around them, through the laws of some atomic principle culled from another constellation and world, the substance of the billowing, hate-charged eddies around them renewed itself constantly and shot out more and heavier tentacles, filling up the gaps torn in their ranks with a constant supply of sacrificial vapors, and, slowly but inexorably, dragged the space-ship down towards their invisible goal.

With white, tense faces turned on Savary's taut form, those within the ship waited on the unknown menace towards which they were being helplessly borne. For hours, it seemed, they sank through those endless tides of crimson radiance like some vast derelict wavering down into the embraces of an unimaginable sea, a sea wherein the hostile currents bore the drifting mists of the Vapor-Things, like noxious seaweeds, within its unplumbed depths. Suddenly, Nadja seized Savary's arm and uttered an appalled cry.

Beneath them stretched the floor of this incredible world!

They were descending towards an ultimate brightness of palpitating crimson whose radiations were almost beyond the endurance of mortal eyes. Something in the violence of that upward-beating light made Savary screen the vision-plate to its smallest proportions.

"Turn your eyes away! That light is deadly!" he barked over his shoulder.

He himself, however, did not cease from bending over the reflection of that lethal glow. While the pupils of his eyes seemed to distend under the radiations beating up against them, as though about to burst into flame, he stared down at the scene below. As far as he could see, the evil brightness of that lurid floor stretched and pulsed and palpitated with a blinding, crimson glow. The luminous waves throbbing up from it seemed to spread like flowing water throughout all the Inner World. Like fluctuating streamers of deepest sable, the great, tentacled vapor-Things that had seized them, seemed to swim, in a delirious ecstasy, back and forth over the dimming distances of the red floor's expanse. Here, without doubt, was the heart and focal center of the subterranean world's life, the source of its ocean of almost material light and the energy-bestower from which came the vitality of that strange and deadly Inner Empire. Even as he looked at that approaching floor, some ominous presentiment of its power made Savary swing around, one hand veiling his tortured eyes, and fling an urgent order at Nadja, who stood ready at his side. Two minutes later, as he bent over the blazing violence towards which they sank, he saw the wavering, puny shadow of an ingot of vulcan that the girl had fetched from the store-rooms, drop downward towards the crimson inferno. For a moment, he followed it with his half-seared eyes, then an exclamation burst from his lips. As it touched the dazzling expanse below, a sheet of intolerable brilliance flared up and around it. Before his glance, its substance, vulcan as perdurable as the *Victory's* hull, melted and dissolved into new radiations of still intenser flame. He measured the distance between them and that waiting glare. In another ten minutes, they too would suffer the fiery annihilation of that fate!

● Decision spurred him to his feet. All their defenses had been tried and proven too weak.

"Gordon, Ramoneda, Ydraas, Zonlor, man the new weapons immediately," he called tensely. "We have only ten minutes. If we touch that floor, we are finished. Nadja, stand ready to take my place if my eyes should give out. When I give the signal, trip the switches of each of the four cylinders. If they work, I think I can tear the ship away from these Things' hold."

Like hounds released to the boon of action, the four sprang to the switches of each of the mysterious cylinders they had helped set in place of an equal number of heat-guns. The low purr of the solar-energy batteries changed to a roaring mutter as switch after switch fell. Bending over the fiery vision-plate, Savary tried at the same time the last navigating trick he possessed, one impossible in a weaker craft. Releasing all the port-side rockets at the bow simultaneously with the starboard and rear ones, he gave the ship such a fierce twist that it tore itself . . . . rotating like a flaming pinwheel . . . . out of the clutches of the tentacled servants of the fiery floor.

At the same time, a golden, glowing vapor sprang forth from the four ports of the new weapons Savary had developed. Out towards the billowing, pitch-black multitudes of the Inner World Things, it spread in soft fan-shaped plumes and down, in delicate, shimmering puffs, towards that awful floor of lethal light. An infinity of tiny traceries of pink flame ran, like the threads in the woof of a pattern, through its expanding and blanketing shield. A minute, two minutes passed, while the cylinder of mighty vulcan rotated upward in flaming gyrations that threatened to tear it asunder.

Suddenly, Savary braked that wheeling flight. Around them, everywhere, as far as the eye could plumb the glowing inferno that stretched in limitless shades of fiery radiance on either hand, the whirling legions of the Things had clotted in vaporous masses around each soft, golden cloud or plume. With startling suddenness, they began bursting apart, spreading and tearing out into thin filaments of paling, greying vapor whose very hues were that of death. A minute more, and the first of the pink-shot golden puffs had floated down to touch that blinding floor. It blazed up fiercely, and Knute Savary, unnoticed, flung one hand across the tearing agony searing his eyeballs. Then . . . . like some stricken thing . . . . it shivered in a vast, terrible convulsion that rippled away into endless, shuddering vistas. Its fierce radiations dulled till the eyes of those within the space-ship could face them unimpaired; dulled and ebbed, burning a low and sullen red like the dimming eyes of a sick animal.

"Take the controls, Nadja. Aim for the chasm," Savary said briefly.

Like a freed arrow, the space-ship lifted higher and higher into the dimming radiance of the horizonless world, soaring off unhindered by the stricken foe, while around them the infinite drifts and eddies of the Things clustered and sucked at each new puff of golden vapor, only to burst apart as though rent by some explosion within the heart of their molecular life.

Far away from the lethal depths to which they had been dragged, the *Victory's* crew flashed within their liberated cylinder. The shuddering, exploding ranks of the foe made no attempt to follow them. At a sharp order from Savary, the four new weapons were switched off and they sped in a vast solitude . . . . far from the dying creatures who denizened this world . . . . heading for where Nadja thought the gaping chasm caused by the inter-lunar collision opened a way out of the defeated sphere.

Suddenly, the purr of the solar-engines faltered and slowed. Savary stiffened and his mouth grew grim. The flame of the rockets dwindled to a mere trickle that dripped forlornly at the ports in heavy drops of fire. Nadja cast one look at the power-indicator on the control-board.

"The solar-reservoirs are empty . . . . we have no power left!" she said with whitening lips.

CHAPTER XVI

The End of the Things

● Zonlor, Ydraas, and the two Earthmen had followed Nadja back into the control-room. In a drilled silence, they heard the words that spelled their end. About them, the space-ship's mighty engines had ceased their throbbing; but, born on by the impetus of its flight, the great cylinder still fled through the red glow of the Black Moon's heart.

Silence—a world of dulling crimson, viewless and boundless as the sea, through which they sped and must continue speeding till their momentum faltered and left them to sink down and down to where the sick pulse-beats of the remote, invisible floor waited to wrap them in its final embrace. Nevertheless, not one face blanched or eye faltered as destruction . . . . destruction all the more cruel that it came at the very moment of victory . . . . looked them in the face. Suddenly, Nadja spoke with a stern, undaunted smile.

"Well, at least we have done what we came here to do. Earth will be free of these things for good."

Carl Gordon cast his eye down towards the vision-plate and spoke quietly. "There is the chasm opening above us. We have found our way back to the entrance of this world."

A mile or so above the space-ship, the towering walls of the great planetary wound rose up to the infinitely remote and invisible gateway beyond which waited the pure reaches of spacial night. Like a supreme irony, it opened the way for an escape now rendered impossible by their

empty reservoirs of power. Suddenly, however, Savary swung on them.

"There is still a chance! Nadja, we have forgotten the emergency reserves of power stored in each rocket-tube! Turn them on. They may get us to the surface, and once there, we can refill our reservoirs from the direct rays of the sun."

While the others still fumbled with this sudden, new hope, the girl whom space had seasoned to a steel-like temper, slipped back into her seat. Her fingers pressed a row of hidden (till now never used) buttons concealed under the edge of the dial-board. Her hands swung the nose of the slowing ship up in a direct line with that mighty gash above. The rockets woke with a cough and purred anew. Then, suddenly, Nadja slowed them to a whisper. Eddying down from the chasm above their heads, the last, belated rear guard of the Things that had fled Earth were pouring forth in a vast, salable column.

Even as the minds around him reeled before this final blow to their reawakening hopes . . . . for even if the rocket reserves sufficed to bear them to the distant surface, their power would never allow them to win past the clotted opposition of this laggard swirl of foes blocking their egress . . . . Knute Savary leaped to his feet.

"There is one last hope," he said. "Wait here and give the ship all it will stand if the chasm above clears even for a minute."

He moved towards the door and Nadja seized some glimmer of his thoughts and cried out: "Where are you going? Knute! Answer me!"

He turned and explained hurriedly. "If we charge them with one of the rocket-boats, there is a chance that they will solidify as one mass around it . . . . they have a bulldog's blind pugnacity . . . . and thus clear a passage upward through the chasm. Once past them, they can never catch you."

The girl leaped up with a frantic cry, but he was already without the room, racing for the nearest rocket-boat berth. Ydraas and Gordon were already on his heels, while Zonlor followed them, his thoughts deeply shaken.

"I will go," he cried after Savary. "I am an old man . . . . death is my due! Your life is too valuable . . . . none other could replace it!"

Savary's hand was already on the door of the rocket-boat compartment. As he wrenched it open, he spoke curtly over one shoulder. "This is my job, I am Captain here." Before they could reach him, he had leaped into the small room where the rocket-boat lay berthed. But immediately, he drew back! The boat was no longer there!

The three racing after him flung themselves upon him from the rear. They too stopped and stared. As they stood there, the soft hiss of escaping air and the clang of the outer door of the rocket-boat's outer-shute told them what had happened. Gordon flung a quick glance at Ydraas and Zonlor. Nadja had stayed . . . . agonized, but inflexible . . . . at her pilot's post at the controls.

"There is only one man missing. Ramoneda is gone!" he said in a shaken voice.

As the little craft slid out of its shute into the red glow of the Inner World, the old Castilian aristocrat smiled with something of the gay arrogance of youth. Nursing bitterly as he had done the feeling of being useless impedimenta on the *Victory*, he felt a new lightness in his heart as he headed his small craft's nose towards the swimming billows of dead-black above his head. He lifted his haughtily modelled head. He was old and his state lay stripped of life from the passage of the Things, and here was a good way to die!

The black vapors swirled down towards him from the red washes of the lurid sea of light. Dumb, malignant tentacles reached out towards the frail stelumin shell that carried him. Carlos Ramoneda's mouth set to a grim, steady line. With inflexible eye, a president of distant

Earth went hurtling down to his death!

Within the space-ship, Nadja uttered a short, terrible sob as she saw the slim, silvery craft speed forth like a loosed arrow towards the stygian waves of black above. As Savary entered the control-room, she stared at him and swayed, while for a moment everything around her turned black. He stood above her and spoke slowly. "It is Ramoneda. He must have slipped past me . . . . or out through the other door . . . . while I turned to speak to you."

On the vision-plate without, they saw the little ship touch the vanguard of the vaporous column. As Savary had foreseen, it eddied for one moment in a constricting whorl of dumb animosity, then began to clot like a molecular vise around the vortex in which Ramoneda had vanished. Savary spoke in a strained voice. "Don't waste his sacrifice, Nadja." Off to the left, a vast half of the chasm had opened clear and without shadow of the Things as the Black-Moon Things clotted dumbly and viciously around its puny foe. Towards that clear space, the ship flashed upward like a stone from a sling. No foe moved to bar their way, but Nadja bent anxiously over the indicators of the emergency reserve tanks, recklessly accelerating beyond any consideration of comfort or safety, so that their momentum might still serve to carry them free should their power fail too soon. Dimly, she felt that the only thing they could now do for the man whose life had paid their toll-price out of this hellish world, was to justify his sacrifice. A double obligation to win free now lay upon them all.

Meanwhile, behind them, the appalling constriction of the vapor-Things slowly loosened and expanded. A twisted scrap of stelumin fell from their vaporizing heart. Wavering slowly, the crushed remnant of a rocket-boat floated slowly downward through the dulling, crimson world. Infinitely far beneath it, the sick but still evilly glowing floor waited to fuse it in its clutches. Far above, the bright hull of the *Victory* climbed towards sunlight and space.

● The reckless climb continued. Between walls of deep and sullen light, they flashed, their rockets singing wildly behind them. Acceleration tore and hammered at their pulses. They swallowed stimulants and forgot its pangs. Suddenly, an arch of darkness opened overhead. "The sky! I can see the stars!" Ydraas called out exultantly.

Up and out they flashed, describing a long parabola as they left the alien world for the clean spacial night. The cold washes of the sleeping gases stretched somberly below them as they fled towards the constellated void. "We must not only win free from the abyss," Savary said warningly, "but far enough out into space to overcome the attraction of the planetoid." But already, the Black Moon was growing spherical beneath them. Then the rockets spluttered, coughed once or twice, and purred to a rest.

Nadja clicked her teeth together grimly. "Our momentum must carry us free," she said. Zonlor cast a long, measuring glance at the Black World below and shook his feathered skull. "With any other world, it would suffice. But this one holds us still. Its pull is in proportion to its density . . . . and that is far greater than Earth's. We cannot get free!"

Savary laughed suddenly. He had remained seated in silence beside Nadja, seemingly content to leave the piloting of the space-ship entirely in her hands. Now he said: "I think we can. Steer so as to use our momentum . . . . not to get away from this accursed sphere. Zonlor is right. Its density is too great to be conquered by mere momentum . . . . but to swing the ship into a temporary orbit around it. Our solar-reservoirs are already charging. If we can circle the planetoid for an hour or two, we will have enough power to tear ourselves away from even its gravitational pull."

"But if our velocity is not great enough to tear us away from the planetoid, it will not hold us in an orbit around it," Gordon said.

"We shall be falling towards it still, but in narrowing circles instead of per-

pendicularly. Nor will the pull of the sphere be fighting directly against our stationary momentum. We shall gain enough margin of time to allow us to recharge our reservoirs."

Under Nadja's hand, the space-ship swung obediently in a long curve that paralleled the surface curvature of the Black Sphere below. Around them, the cold blaze of familiar constellations wheeled silently across the infinite reaches of the sky. On the side of the ship facing the sun, the charging reservoirs began to hum softly with the instreaming power. They sped in a pulseless silence . . . . beings temporarily exhausted by the emotions and perils of the last few hours. Rising athwart the frame of the vision-plate, the bright disc of the earth glowed against the cold spacial night like a gigantic, many-hued moon. Enfolded in the familiar pattern of the frozen void, the horrors of the glowing world within the Black Moon's heart seemed almost the figments of a dream. But far below their keel, the sheenless, liquid gases of the alien satellite still seemed to wait and to watch hopefully on the course of the power-drained ship . . . . unresigned as yet to defeat. From the great gash splitting its surface, however, no stir or sign of life emerged. Far below that somnolent gaseous surface, the torn and cowed surviving millions of the sable foe remained in hiding.

After a while, Nadja cast an expert glance at the height and velocity indicators on the control-board and said: "We are swinging around in a very slowly narrowing orbit. Before we can be pulled out of it and begin to fall freely, our reservoirs will have charged enough power to pull us away from here. Those weapons you used at the end must have consumed an almost unbelievable amount of power, Knute. Our reserves have always been supposed to be sufficient for weeks of flying and fighting."

Zonlor thought curiously towards the silent figure of Savary. "What kind of destruction was it that you hurled at them at the last? Nothing we know of on Lydda . . . . in chemistry or physics . . . . resembles it."

Savary had left Nadja's side when they emerged from the red chasm and moved to a seat at the farthest end of the control room. Leaning back in the shade of the cushioned couch, he answered the old Lyddan.

"Molecular disintegration . . . . in arrested motion, an admixture of an old discovery with a new one. Years ago I discovered, during some other research, a means of arresting and holding in suspension the action of the disintegrating rays I was then working on. This at the time struck me as being mainly useful as a defense against these rays should the secret of them ever fall into hostile hands, but by applying the principle of this discovery to our need of the moment, I found another use for it. Those golden vapors you saw were highly magnetic gases charged with a potential disintegrating current which contact with matter of a certain, very slight density released. The disintegrating principle is infinitely more than that of the rays from which it was perfected. It disrupts the intimate composition of the atom, freeing electrons and protons so that they in their turn bombard the neighboring atoms and explode them. The action is progressive. It is more nearly atomic, internal warfare than pure disintegration. I had already learned from Hassan that these Things seemed to possess an absorbing power over the magnetic properties of any field, so the principle behind the magnetized gases was very much that of baiting a trap. The magnetized vapor penetrated into their molecular substance and detonated there . . . . to use a purely mechanical description.

"The three simultaneous actions needed, however, the producing of an enormously powerful disintegrating principle, of a counter-current that froze it, as it were, and held its powers in suspension, and the magnetizing of the gases in which both principles were embodied, used up so vast an amount of power as to make them weapons almost as dangerous to use as to leave alone. Their consumption of

power must have been, as a matter of fact, far beyond even my computations, and these were sufficiently disturbing to make me wait till the last and direst need before using so expensive a method of destruction."

"The secret of how a mind like yours originated on a planet as young as your Earth, is still perplexing our scientists," Zonlor said reflectively. "If this discovery of yours has other uses than destruction . . . . with which Lydda has little to do . . . . it will prove an interesting subject of experiment. You have already added vastly to our store of knowledge . . . . despite the ages that separate your race from ours. I regret that we could not have captured some of the substance which actually composed these Things. As it is, we shall probably never solve the secret of their material composition, nor that of where . . . . in what corner of the cosmos . . . . they originated."

● Nadja interrupted the old Lyddan's musings by turning and looking at Savary over her shoulder. "Will you take my place, Knute?" she asked. "We are beginning to drop more rapidly . . . . perhaps you had better handle the controls yourself."

From the shadowy corner where he sat, the voice of Knute Savary came rather grimly. "I am afraid that you will have to do all the running of the ship from now on, Nadja. I gave over the controls to you because I could no longer see. That infernal floor of light has burnt my eyes out. You should have let me get to the rocket-boat before Ramoneda did."

A low cry broke from the girl. There was a minute's stunned silence during which the *Victory* flew on its silent course forgotten by all save the wheeling stars whose faint gleam of light brushed frostily across its shining hull as it flashed through spacial night. Then Zonlor hurried across to Savary's side and examined each nearly disrupted eyeball carefully. He spoke authoritatively.

"The sight is gone . . . . but you will see again. Our scientist-doctors of Lydda can mend your burnt out retina for you. They could even give you a new one, if necessary. Medicine is an old science in our world. A mind such as yours cannot be allowed to be crippled by blindness. It would be too great a price to pay for the saving of one world among many."

An almost imperceptible flash of emotion passed over Savary's face.

"My thanks, Zonlor," he said. "I had thought myself henceforth useless. Now, Nadja will be my eyes till we get back to Lydda. How much solar-power have we stored so far?"

Nadja looked at the indicator. "Nearly one-half our capacity."

"Enough to tear us away if we chose," Savary commented.

"If we chose?" Nadja questioned with a lift of her eyebrows. Knute Savary smiled grimly. "Since we have done so much, why not finish it?" he asked. "If we leave this foul world to exist within a system where it should never have come, the danger of an invasion of these Things will always overshadow the Earth. There are many still alive down in that unnatural realm of theirs. All those who killed Ramoneda are still untouched. They may spawn again and return one day to attack our world. We cannot leave till we have destroyed their sphere!"

Ydraas smiled at Carl Gordon's amazed stare. "It is no harder to destroy a world than to recreate one from the desiccated bones of half a million years of desolation," he said. Nevertheless, the air-guard looked over at the blind, still face of the man opposite him.

"But what can one space-ship . . . . however mighty . . . . do against the planetary mass of a sphere such as this?" he asked. "Even with the disintegrators, it would take a lifetime to eat away the substance of which it is composed."

Savary smiled a little. "We do not need to destroy it by our own efforts. We shall make it destroy itself. But to do so, we must once more imperil our chances of seeing Earth again. Are you willing?"

Nadja's glance swept them keenly and

their eyes gave sufficient answer. "What shall we do?" she said.

"How far are we from the surface?"

"About half a mile . . . . but we are being swiftly drawn nearer. In ten or fifteen minutes, we will have to use the rockets."

"Can you sight the great chasm by which we entered?"

Nadja looked down. "It is just ahead of us. We will pass over its eastern rim in five minutes."

"Let the ship circle around the planetoid once more, then. Use the rockets if necessary . . . . but as little as you can. We need to store up a little more power for what we have to do. When we draw near it once more, brake and tell me."

A Vision of the Future

● Circling lower and lower, in an ever contracting orbit, they flew above the oily tides of the Black World. Carl Gordon shuddered as those frozen depths of liquid gases eddied and dimpled closer and closer to their keel. Everything about this alien world was hostile to his human instincts. To the feathered Lyddan, no one world was more unusual than another . . . . long centuries of knowledge had sapped the power of wonder in his race . . . . and to Ydraas of Speira, whose youth had sunk to sleep under the spell of a planet's death, whose flesh and blood had known the awful isolation of a million-year-later awakening, all horrors or emotions were but incidents in this new life to which he had been translated, and in which he moved as an alien whose heart dwelt ever in some lost, aeon-old past. Savary and Nadja, he thought, were no longer wholly human. One world was too small to claim them as her own. They were citizens of the vast reaches of space where wonder is not and emotions become puny things. Now that Ramoneda had gone, he alone remained to feel the normal reactions of human nerves and instincts before the ominous, ultra-stellar repulsion of the slumbering sphere beneath.

Even as they sank lower and lower in that mighty, gravitational hold, he felt his mind grow dizzy as it questioned its remote, forever unknown origin. What distant constellation, he wondered, might have given it birth? What catastrophe of what distant sun had flung forth so alien a mass and sent it hurtling from its allotted orbit across the spacial path of his own world? None would ever know. Perhaps it had been flashing across the void since before the Earth was born. Destined . . . . b e f o r e Man existed . . . . to flash across his skies and remain the captive of his world. Perhaps not only another system but another galaxy had seen it created. The insoluble questions . . . . the vast vistas of enigmatic Time and Space . . . . made his mind ache. He tore it away from the abyss over which it bent and looked once more at the world below.

Nadja had given the space-ship an occasional spurt of the rockets, but even so, its keel seemed almost to graze the ominous wash of sullen liquids beneath. No more than a few hundred feet above that dark, glaucous sea, it sped towards the lurid glow that indicated their approach to the great chasm ahead. At last, the great planetary wound stretched beneath them. The red-washed gases dimpled sluggishly behind their walls of twisted and tortured rock. Twisted and tortured, miles thick at places, at others no more than a shell of steep pinnacles piling one on the other, the torn edges of the abyss strained away from the lurid glare beneath . . . . an empty glare where nothing moved or threatened . . . . bending in black, red-washed crags and sudden, springing cliffs, above the ominous, sleeping eddies they held back.

"There is a very great chance that the forces lying frozen and latent within these liquified gases are enormous beyond our computation," S a v a r y said gently. "Equally so are the dissolving powers of the floor of their Inner World. Choose a spot where the dividing wall is thinnest, Nadja, and cut through it with your disintegrators. I think the Lyddan force-beam will hold the *Victory* stationary while you do it."

The braking rockets flamed across their bow and the pale ray of the disintegrators sprang forth to finger, as though caressingly, those Stygian, twisted peaks. At the touch . . . . even as Zonlor swung the force-beam down into the glaucous surface as an anchor for the space-ship . . . . they began to crumble and dissolve. Their crests eroded as though racing centuries were carving them away before their eyes. Nadja had turned the disintegrators on the thinnest, visible portion of the barrier that cataclysmic causes had thrust up between the sleeping potentialities of the frozen gases and the unnatural, consuming radiance of the subterranean realm. Beneath that touch, peaks crumbled to atomic powder, ramparts of jet-like stone blazed briefly; great crevasses grew and widened above sudden tunnels blasted from the trans-stellar rock. The red glow of the vast gateway of the Inner World illumined the play of those devouring rays, while above that black and crimson world wheeled the lidless stars, distant and disinterested spectators of a duel, such as space had never seen before.

At last . . . . with an unheard but mighty crash, a rending of aeon-old matter . . . . the u n d e r m i n e d summits swayed and bowed their heads. For more than a mile, the crumbling ramparts swayed and bowed. Then . . . . in a black torrent of mighty boulders and pebbles vast as mountains . . . . the dividing wall hurled itself into the ruddy inferno below. For one second, each within the space-ship sat in awed silence, imagining the miles-deep plunge of those masses of hurtling rock, the vast inferno that would rise below as they swept into the crimson light-sea of the under-world. Then Savary spoke sharply.

"Nadja! Pivot the ship and get away from here as fast as you can. Give her all the acceleration we have. Hold the space-drug in your mouths ready to swallow if the acceleration becomes past endurance, but hang on . . . . you, Nadja, at least . . . . as long as you can. This is going to be a race with destruction!"

Beneath them, the slow and sinister spectacle was sweeping on to a climax before which they held their breath. With a sluggish reluctance . . . . a vibrationless majesty of movement . . . . the aeon-old sleep of the liquid gases had wakened to motion. Like some semi-petrified torrent, it was slipping out over the edges of the broken ramparts, along the ravines dug in the jet-like rock, widening and eddying as it flowed till its black, red-washed waves were at the very lip of the abyss. Like some inky Niagara's flood, they seemed to curl and falter there, to poise a moment like some arrested destiny above the glowing gulf beneath. Then, in one mile-wide, massive jet, they poured themselves into the yawning mouth of the entrance of the subterranean world.

● Even as she swung the space-ship's head around and pointed it towards Earth, Nadja saw all the distant surfaces of the gaseous sea stir from its ageless oblivion of motion and swirl and toss in short, thick waves, as far as eyes could see . . . . all converging towards that black cataract. The river pouring itself over the abyss's lip was now a torrent of headlong, terrifying black. Nadja could imagine its league-deep plunge and whirling, endless fall, even while its black convulsions of slowly wakened might poured a strange, shaken feeling of awe into even her tempered and tested mind. But beside her, Savary was saying, "Quick! We have no time to lose!"

The rockets flared, dimming even the glare below. Like stones flung from a sling, the space-ship leaped across the constellated skies. Swinging the vision-plate backwards towards the rapidly diminishing sphere, Nadja saw a vast flaming cloud of vapor pour upwards and fill and overflow the distant gash of crimson that was the Black Planet's cosmic wound. Recklessly, she flung the throttle of the rocket-tubes to their full width. Even as Savary, she knew now what dread convulsion might yet catch them up in its cosmic might. The stars seemed to reel about them in a maddened sky; the weight of all their merged universes

seemed to press upon their gasping lungs and agonized frames! For a minute, whorls of agony twisted and wracked their limbs. Then . . . . like a merciful sleep . . . . the narootic of the space-drug seeped through their veins, giving them its brief respite.

When they came back to their senses, the black sphere lay far in their rear. Nadja heard Carl Gordon utter a choked exclamation and dragged herself from the last bonds of coma to bend over the vision-plate. Beside her, Savary's voice called out, "How much more acceleration can we give her?"

Conquering the wracked agony of her leaden limbs, the girl consulted the indicators and saw that they registered . . . . for the first time in their existence . . . . their highest possible speed. "No more," she answered. "We are making our maximum now." Then she turned to the vision-plate and tightened her hold on Savary's arm. Far behind them, the Black Moon hung like some immense, smoking bomb. Above it floated a great plume of brilliant vapor. From the mighty chasm, the clouds of flaming gases generated by the volatilizing of the dormant elements of the planetoid's surface within the crimson world beneath had expanded till they formed a great banner of seething light that seemed to be hurling its long, fiery tentacles across the widening gulf of space in pursuit of the racing *Victory*.

"God! What a spectacle! What can be going on down in there?" Gordon ejaculated.

Savary, picking up Nadja's mental description swiftly, spoke with a cold, slight smile. "Annihilation . . . . I think: an annihilation which may yet sweep us up in the outer fringes of its final conflagration."

The long streamers of flaming gases . . . . as though in confirmation of his words . . . . were reaching out after them and gaining on them in that strange race of unsentient matter against life-impelled metal. They devoured the spacial leagues . . . . hurled through the black night like something springing from the sling of some vast cataclysm that was only just gathering its momentum, and whose power . . . . cosmic and terrible though it was even then to behold . . . . was still in the act of being born. Nadja had a swift vision of the glowing inferno from which they had escaped, whirling with the tides of volatilized gases and filling with the terrible potentialities of their suddenly awakened substances, of the consuming glow of the deadly, pulsing floor, beating fiercely through that tidal wave of new-born forces, dilating and seething in an effort of survival that was tearing its alien realm apart. Even as her fingers clamped on the levers of the rocket-tubes . . . . seeking to wrest from them every last ounce of power they might conceal . . . . those advancing billows brightened to an unendurable brilliancy, became suffused with strange hues of crimson and purplish-black, expanding and writhing across the constellated skies like some vast octopus of flame. Panting and voiceless, the others on board the space-ship bent with her over the vision-board to watch with distended eyes, the immense spectacle of coming dissolution painted across the proscenium of the stars.

"Zonlor, take the spectrum of those gases. It may tell us something of the composition of that world when . . . . and if . . . . we have time to study it," Savary said quietly.

The old Lyddan obeyed. Knowledge was greater to him than even the spectacle from which he turned. Though their life hung in the balance, it must be served. When he turned to the vision-plate again, the *Victory* was streaking across the sky like an arrow of flame, but behind it . . . . ever vaster and more threatening . . . . raced and spread that immense whorl of indescribable brightness, eating up the spacial leagues at a speed vaster than even their own, and flowering across the icy dark like some unbelievable nebula of original fire.

Savary sat with an arm around Nadja . . . . seeing with her eyes that breath-taking spectacle of a world blossoming into the fires of its own holocaust. Now the

whole sky around the space-ship glowed with the advancing wash of that billowing column and thousands of miles were wrapped in their whirlpool of flame. Ahead of them, Earth hung like a glowing beacon, calling the space-ship back to her, but behind them, the plume of fire seemed to loom like a tidal wave above their heads . . . . blotting out even the dark bulk of its parent globe.

Suddenly, the advancing billows seemed to falter and retract their outermost tendrils of flame. Like an opening, incandescent flower, the floating banner of seething gas widened and curled back on itself. At its heart, the Black World hung for one brief moment . . . . clear and distinct, though shrunken by the distances already set between. A great gash of blinding brilliance etched the abyss that sundered it in two, and from this mighty wound, the flaming gases had ceased to pour momentarily. Briefly, they saw it float there . . . . somber and alien as its brood. Its upward swirling plume of fire flattened and bowed above it. Then . . . . in an appalling, a voiceless yet unforgettable maelström of pure flame . . . . it dissolved! Chaos sprang forth as rock and minerals spawned by some unknown, distant sun returned to their original vapor. A world was dead!

The stunned mortals within the fleeing *Victory* saw the whole arch of the constellated skies vanish behind a writhing corona of immense tentacles of black and crimson. White-hot whorls of vapor, thousands of miles thick, raced beyond. Behind them, an awful, dark brilliancy, a vast conflagration impossible to describe, poured itself out from that crucible wherein had dissolved a world. The wan and distant cadaver of the terrestrial moon vanished amid the outpouring frenzy of that cosmic fire. Then the glowing van of the billowing gases in their rear leaped forward and swept them upward in the fringes of its seething tide.

Before Savary could command, Nadja had flung on the full power of the refrigerating machines. They were flashing through a sea of flame, of whirling, incandescent gases that paled the flare of their rocket-tubes to ghostly shadow-streaks.

"At least Ramoneda has had a fitting funeral pyre," Savary said grimly.

"What temperature is it outside?" he added after a minute.

Nadja answered quietly. "The indicators have stopped registering."

"What temperature inside?"

"A hundred and ten . . . . and going up."

"Is every cooling unit working?"

"Yes. The rocket-tubes have not fused yet . . . . they are still functioning."

Carl Gordon looked across at Nadja and Savary. "The walls *in here* are growing hot."

Nadja nodded and remarked calmly, "I am giving her all the acceleration she will take . . . . while the rockets are still working."

The ship was still racing in the vanguard of the glowing gases. But the air within her triple shells was growing oven-hot. The fusing plates of the outer Speiran vulcan began to sweat great drops of melted metal. Savary felt Nadja sway against his shoulder and held her close.

"Lo! Even on Speira, they will see the glow lit by our end," Ydraas's voice said faintly to Carl Gordon who had sunk to the floor beside him. Then the space-ship fled on through the crucible of cosmic flame around it bearing an unconscious crew within her walls.

Knute Savary, however, had not quite lost all knowledge of what passed on around him. Holding Nadja's light form in his arms, he felt, through his dissolving senses, a slight acceleration . . . . the least of forward lurches . . . . as the melting ship slipped out of the already retracting maelström of fire. Feeling blindly along the control-board, he found the rarely used switches that motivated the sun-shields used as screens against the solar-rays when the storage batteries became overloaded. He pressed them down and heard the little bell that indicated that they were in working order. As they swung out between the faltering gases

and the speeding ship, the cooling system began to win out. The air became breathable. The seething caldron dropped farther and farther behind, though the sightless pilot could only guess its receding tides of brilliancy . . . . and the cold of space began hardening anew the fusing, but still whole, outer shell. When Nadja roused herself from her swoon . . . . the taste of restorative drugs strong in her mouth . . . . the air within the control room was already endurable. She struggled to her feet, and bending over the vision-plate cried, "We've won, Knute! The Black Moon is destroyed!"

● Knute Savary drew her close. "Yes, we've won. Earth is safe. In a few years, her scars will be mended. You and I are free to think of each other, to turn our ship once more towards the trackless ways of space. Speira, Lydda, Marinoe, and Reinos await us . . . . and all the still, unexplored worlds of that vast stream. We will never be cut off from Earth any longer . . . . but her ways would be too narrow for us now."

Nadja leaned her weak frame against his shoulder. "Lydda first," she said. "Lydda and your sight back again. Afterwards . . . . all the ways of space! We will lift other planets from the airless death, guide other embryo civilizations up from the abyss of evolution . . . . meet other species whose minds can teach things to ours. Yes, Earth is too small for us now . . . . but we will come back to her often."

Carl Gordon pulled himself painfully to his feet as they spoke. Standing before the larger vision-plate, Nadja and Knute Savary were looking outward away from the flaming torch of the Black Moon's pyre, towards strange worlds of invisible light and unknown orbits racing in the distant, asteroidal stream. The air-guard swung his own vision-plate the other way. Earth swam up glowingly within its field . . . . a mighty sphere, pulsing with soft colors against the starry reaches beyond. Across space, her voiceless call sped out to him and the vision of her future glowed brightly within his mind. Ydraas touched his arm.

"I am glad that we have saved her," he said. "Some day, Earth-man, our worlds will be woven together with invisible bonds. The solar system will be one great union . . . . evolved by your Savary's hand."

Zonlor's grave thought coursed towards them as he staggered to his feet.

"A great future looms ahead of us. Fountains of knowledge as yet unexplored will be brought into the union we dream of here. The course of spacial laws has been diverted . . . . organic life has conquered the blind cosmos. One day we shall all of us belong to the United States of Sol."

Beneath them, the swaying globe of rescued Earth floated upward towards them. Afar, reborn Speira turned in the conquered night of space. Between them sped the invisible bond of an indestructible tie. The conquest of space had begun. Man had tamed the cosmos. Henceforth, the organic mind was ruler of even the stellar wastes. Ordained rulers of the greater, ordained world of solar space, Nadja and Savary looked outward at the blazing stars.

THE END

A Treasure-Chest of Science

● SCIENTIFIC news for the scientific reader, a specially large number of experiments in chemistry, radio, magic, X-rays, etc., for the experimental reader; construction of a telescope, a microscope, a miniature car for the handy reader—these are some of the many things in the current (March) issue of

Everyday Science and Mechanics

NOW ON ALL NEWSSTANDS

THE BRAIN-EATERS OF PLUTO

By Kenneth Sterling

(Continued from page 825)

appendixes. (Now you know how long it took to build the ship!) He also learned that science had advanced greatly and that they would be able to replace Unconscious Mary's brain.

Professor Jameson J. Keller, M.D., D.Sc., X.Y.Z., B.V.D., P.D.Q., leading brain surgeon of the time, was to undertake the undertaking of replacing the brain. (He was an undertaker!) He made an incision in Unconscious Mary's head and put in the brain. Then he placed her in an incubator to hatch.

Ray Williamson was worried. Would the operation be successful? Dr. Keller suggested that he read a magazine. He opened the newest copy of *Nonsensical Stories.*

In the middle of "The Shylock of Space," he was interrupted by the buzzing of a buzzer. He went into the incubator room and came out with Unconscious Mary (no longer unconscious). She and Ray clinched (embraced).

And so ends this story of the spider-like brain-eaters of Pluto, the death-dealing insect-men of Mars, and the brainless homo-sapiens of Earth.

THE END (Thank Goodness)

MAN IN ROCKET SHOT 6 MILES

(EXTRACT FROM A BOSTON NEWSPAPER)

London, Nov. 5 (Sunday) (US)—History's first successful passenger rocket flight was achieved on Oct. 29 on the Island of Rugen in the Baltic Sea, according to a special dispatch from Rugen in today's London Sunday Referee.

The flight was held in striatest secrecy under the auspices of the German air ministry, which has purchased the plane, it was stated.

Otto Fischer, brother of Bruno Fischer, inventor of the rocket, was shot up 32,000 feet—more than six miles—in the 24-foot long steel projectile.

Fischer, it was said, at the peak of the rocket's trajectory pulled the ring on a parachute attached to it and floated down to safety, shaken but uninjured. The ascent lasted 10 minutes, 26 seconds.

Doubtful of returning alive, the dispatch adds, Otto entered the rocket and Bruno threw a switch. There was a blinding flash and the rocket shot out of its steel frame to disappear in the sky.

It reappeared, a speck floating gently earthward, its pilot manipulating the fins so as to land on the island. Otto was quoted as stating:

"I left the ground in a deafening roar. An unbearable weight crushed me to the floor and I lost consciousness for a moment. When I came to, the altimeter was flickering at 32,000 feet. It began to drop rapidly. The asbestos floor was tremendously hot. The rocket was propelled only 300 yards by the initial explosion. It was driven further by the remainder of explosions in the tail."

TO A SPACESHIP By August W. Derleth

Proud monster of the deep, black skies,
Soaring where the frozen death lies
In wait—probing with your human eyes
The age-old secrets of the skies.

CHILDREN OF THE RAY

By J. Harvey Haggard

(Continued from page 839)

ears rang. His eyes ached. Yet he realized that he must get up, that the hordes of Tatrons would be surging over them. Water was pouring over his body in streams, beating his face in great continuous drops. He loosed the strangely limp arms of the scientist and struggled to his feet. At last he could see, dimly, a white unnatural vision which gradually became normal as his eyes readjusted themselves.

At his feet lay Professor Bablon, stunned to unconsciousness, beat by the rain pouring viciously down. He saw a charred, scorched thing some distance away which had been King Tharg a few moments before. Or had it been years? Where were the Tatrons? Dimly he saw them through the driving rain, a struggling mass of superstition-crazed creatures fighting their way down the slope. The pillar of fire was dimmed and hazy through the driving storm. The bolt from heaven which had struck down the king from their midst had been too much for them. The Grach-people had vanished also.

He recoiled—then suddenly recognized the charred silken rope, down which a few moments before a tremendous voltage of static electricity had raced from the clouds. It was creeping by, and he seized it. A moment later, he was jerked over the ground viciously.

He would not let go. He was down, dragging, holding on desperately. Then the rope paused. He reached up and jerked violently several times in succession. It seemed that there was an answering tug. He hoped wildly that it was from those above.

At least the rope remained quiescent. He swung it over near the limp body of Bablon, tied a bow-line under the scientist's armpits. There was the faintest pulse in the old savant's body, he thought, though he couldn't be sure. The length of rope he had left beyond the bow-line he made fast about his own shoulders. Then he reached up and gave three titanic tugs.

For a moment, there was no answer. Then with a surge, Bablon's body left the ground behind the taut rope. An instant later, Connor was jerked from his feet, and the dim outlines of the ground faded beneath him. He was being pulled upward —upward.

At last there was a great bulk just above from which there was a great port opening. Men—weird grotesque men in spacesuits, waiting in the airlock, were reaching down for them.

Connor lost consciousness.

When he awoke, he was aware that he lay upon a cooling bed, and that men were speaking above him. He opened his eyes to see the uniformed figure of Captain Dane hovering over him, with white-clad physicians in the background. Connor grinned a bit painfully. Captain Dane gripped his hand wordlessly and did not speak. Yet his jaw corded with the strong emotion which he felt.

● "How's the professor?" asked Connor upon awakening.

"All right," returned Captain Dane. "But it's the last time I'll ever let anyone out on a trip like that. When we saw what had happened to the cable, we dared not venture down there—. All we could do was to drag a non-metal rope through the clouds in the scant hopes that you were yet alive down there somewhere. We've been dredging blindly ever since we wound up that charred cable."

Connor felt a knot in his throat at this devotion from the old captain for his subordinates. There was nothing he could find to say. His eyes blurred with grateful tears, and he started to speak but uttered inarticulate words.

"I understand," said Captain Dane. "Don't try!" And he hurried from the room.

THE END

CAVERNS OF HORROR

By Laurence Manning

(Continued from page 865)

"Hmm!" he said with raised eyebrows. "So that's it, is it! Now do you three want to leave the house quietly and go to your homes, or would you prefer to make trouble and arrive at the police station? You should be ashamed of yourselves!"

"Blast your impudence!" snorted Colonel Marsh, "Smithers is down below the ground fighting leathery beasts this instant . . . . I tell you, he told us so himself!"

That, you see, was pretty hopeless from then on. Even the colonel saw the point and stopped talking, to stand biting his lower lip with his teeth and tapping savagely with his foot.

"Let's go," said Seeman shortly.

● We made inquiries when we got back to the city—still only the afternoon of that incredible day—and learned something of poor Smithers' affairs. He had a cousin, it seemed, who would inherit the estate. The cousin lived in England. I called up a lawyer I knew and put certain guarded questions to him. It appeared that nothing could be done by any one until at least seven years after Smithers vanished. Until then he would be presumed still alive. After that, we agreed wearily, the cousin might be approached with a view to buying the estate (Colonel Marsh is wealthy) and so there does remain a dim possibility of our some day learning more about those caverns of horror.

Seeman and I tried hard to get drunk that night, but we couldn't do it. We consumed unbelievable quantities of hard liquor in my apartment and then went around to the Stranger Club and drank more there. The horror of those last few minutes remained with me for three days and I still do not care to think about it more than I can help. Only last night I dreamed about it again — that high-pitched unnatural voice screaming . . . screaming . . . . screaming . . . .

THE END

"Lost Continent" Found on Indian Ocean Floor

Expedition Reports Trace of "Lemuria" Mountain Chain

CALCUTTA, Dec. 12 (UP).—Scientists, groping along the floor of the ocean between India and Arabia, have discovered what they believe to be the "Lost Continent of Lemuria," it was announced today.

Members of the Murray Oceanographic Expedition, exploring the deeps of the Gulf of Aden in a three-month survey, said they had discovered ten ranges of hills on the subsurface, running in a general direction from northwest to southeast across the gulf.

Also, between India and Arabia, they found two submerged mountain chains, with a raised plateau and a deep valley, all hitherto unrecorded on ocean charts.

Seymour Sewell, leader of the expedition, said there was little doubt that this sea floor was once a large land area.

HAECKEL'S THEORY RECALLED

Lemuria was the name given by Ernst Heinrich Haeckel, German biologist, to a hypothetical continent under the Indian Ocean, which he believed once connected Africa and western Asia because of the fact that lemurs, monkey-like animals, were found in such widely separated regions as the island of Madagascar and the Malayan Islands.

Since the posing of Haeckel's theory, however, the need of it has been dissipated by the discovery of remains of extinct lemurs in Europe, western Asia and the two Americas.

(from the New York Herald-Tribune for Dec. 13, 1933)

THE LITERARY CORKSCREW

By David H. Keller, M.D.

(Continued from page 873)

seller. All we want is your price and royalty agreement, and we will sign a contract with you at once. But I want to ask you something. I have been watching your work for ten years, Mr. Le Kler, and the only word to describe it, is 'spotted.' You are one of the most persistent in-and-out writers I have ever met. What is the reason?"

"It is this way," answered the author. "When I write for pleasure, the stuff is poor. Then my wife makes me write for profit, and something happens to me, and the stories please you. That's all."

"In other words," added the wife, "we wish to keep our secret. If people knew what it was that made my husband an author, there would be a half-million new authors in the next year. The competition would be so great that there would be nothing in it for anyone. Now, how about that contract?"

The new book sold. The income was so satisfactory that, for the next year, the loving couple just played around the world. They were in Paris one week end, and Mary Le Kler happened to be looking over the New York *Times* Book Review. Being called away, she carelessly tossed it into her husband's lap. When she came back, he was all excited.

"Did you notice this new book, Mary? The reviewer says that it's going to be the outstanding novel of the year. 'Out of the Depths,' by Dr. Newberry. That is the man that you consulted, isn't it?—the man who ordered the tonic for me. I never knew that he could write. Funny for a neuro-psychiatrist to become an author."

Mrs. Mary Le Kler read the review carefully. Then she smiled, as she commented,

"The doctor must have taken some of his own medicine."

THE END

WONDER STORIES *presents*

The cream of contemporary Science-Fiction. A few of the forthcoming tales are:

●

THE ROBOT ALIENS by Eando Binder. Too many authors assume that extra-terrestrial visitors would be greeted with "Welcome to our Earth!" upon their visit to our planet, but human nature is a very mysterious thing. This story is particularly realistic, for it gives a true portrayal of how creatures from space *would* be received by the "intelligent" creation known as Man.

THE DOORBELL by David H. Keller, M. D. The mere mention of the author's name signifies the quality of this tale. It is typical of the type that has made him the favorite of thousands of our readers. This is based on a very unique theme—one never used before and so convincing that you will have no doubt of its possibility. Psychology enters the tale, as it does all of Dr. Keller's work.

DRUSO by Friedrich Freksa is a novel translated from the German by Fletcher Pratt. Our readers are always ready for translated stories—especially the German ones, for they are most thorough in their development and leave no hazy half-conceptions in the reader's mind. You will find "Druso" well up to the German standard—a triumph of foreign science-fiction.

THE CONTROL DRUG by Benson Herbert is based on a most unusual idea. Self-control, we know, is to a human as the governor is to the phonograph. It limits our emotions and keeps us rational. What would a man do were he to lose this quality entirely? His slightest desires, whether good or evil, would become mad determination. Our author gives his version of the chaos that would result.

Watch for these stories in the next few issues, among many others by the leading authors in the field

WONDER STORIES—*ON ALL NEWSSTANDS*

Passing of the Planets —

Luna

by H. S. Zerin

Spawn of the Earth who once gave her birth
When Time was a dream unborn—
She spins there in Space, presenting a face
Fierce-ravaged, scarred, and forlorn.

No more than a tomb, laid low by a doom
Writ deep in the scheme of each sphere,
Her surface once bore (now bearing no more!)
Such life as we've never known here.

Creatures like Man, but built on a plan
Above and beyond his poor ken;
They flourished when he was a mote in the sea—
And laughed at the Worms that were Men.

Their towers soared high and thrust to the sky;
They harnessed the secrets of Power.
Outlawed was Blood, and the Law of the Mud:
But eyes closed to the coming Last Hour!

Then tragedy fell, and sounded the knell
Of mighty, along with the weak . . . .
The stones from black Space crushed out a great race,
Flaying Luna with Doom grim and bleak.

The comet, too, came, and spewed gas and flame;
And air gone, life fled like a breath;
While on Earth, Man the Worm, with future yet firm,
Planted feet on the ladder to Death.

Science Questions and Answers

THIS department is conducted for the benefit of readers who have pertinent queries on modern scientific facts. As space is limited, we cannot undertake to answer more than three questions for each letter. The flood of correspondence received makes it impractical, also, to print answers as soon as we receive questions. However, questions of general interest will receive careful attention.

THE ASSOCIATE SCIENCE EDITORS OF WONDER STORIES

are nationally-known educators, who pass upon the scientific principles of all stories.

ASTRONOMY
Dr. Clyde Fisher, Ph.D. LL.D.
Curator, The American Museum of Natural History
Professor William J. Luyten, Ph. D.
University of Minnesota.

ASTROPHYSICS
Donald H. Menzel, Ph.D.
Harvard College Observatory

AVIATION
Lt. Col. William A. Bevan, B.S., M.S., M.E.
Air Corps Reserve, Professor of Aeronautical Engineering, Iowa State College.
Professor Earl D. Hay, B.S., M.S., M.E.
Head Department Mechanical and Industrial Engineering and Professor of Aeronautics, University of Kansas.
Professor George J. Higgins,
B.S., Aero. Eng.
Associate Professor of Aeronautical Engineering, University of Detroit.
Professor Felix W. Pawlowski,
M. & E.E., M.S.
Department of Aeronautical Engineering, University of Michigan.

Professor John E. Younger,
B.S., M.S., Ph.D.
Department Mechanical Engineering.
University of California.

BOTANY
Professor Elmer G. Campbell
Transylvania College.
Professor Margaret Clay Ferguson, Ph.D.
Wellesley College.
Professor C. E. Owens
Oregon Agricultural College.

CHEMISTRY
Professor Gerald Wendt
Editor, Chemical Reviews.

ELECTRICITY
Professor F. E. Austin
Formerly of Dartmouth College.

ENTOMOLOGY
William M. Wheeler
Dean, Bussey Institution for Research in Applied Biology, Harvard University.

MATHEMATICS
Professor Waldo A. Titsworth, C.E.,
Alfred University.

MEDICINE
Dr. David H. Keller

PHYSICS AND RADIO
Lee deForest, Ph.D. D.Sc.

PHYSICS
Professor A. L. Fish
University of Maine.

PSYCHOLOGY
Dr. Marjorie E. Babcock
Acting Director, Psychological Clinic, University of Hawaii.

ZOOLOGY
Dr. Joseph G. Yoshioka
Yale University.

The Human Aura

Editor, SCIENCE QUESTIONS AND ANSWERS:

I have heard considerable about the mysterious human "aura" which is supposed to surround everyone. I have the idea that it is not scientific, but some imagined manifestation to be classed with psychic phenomena. Is there really any truth in it?

LAWRENCE FRANK,
Racine, Wisconsin.

(The subject you mention, the human aura, is not a superstition but a real scientific fact which is well established and firmly based by experimentation. This topic was fully discussed in the July, 1932, issue of our sister publication, "Everyday Science and Mechanics."

Editor, SCIENCE QUESTIONS AND ANSWERS:

This aura is composed of ultra-violet radiations and can be detected by the photo-electric cell, or "electric eye." This phenomena is of course not visible to human beings, but is supposed to be seen by ants. The aura is stronger at times than at others. When a person is greatly excited or angry, or has just been out in the bright sunlight for a considerable length of time, he has a much greater aura than when he is calm. This radiation is thought to be caused by the constant regeneration of cells in the individual.

A. Gurwitch, a Russian, was the first to discover these rays, which emanate from living tissues, in 1926, while experimenting with tadpoles, onion roots, and yeast.

A peculiar and interesting fact is that the total radiation of this sort emitted by the entire population of the earth would be just about strong enough to light an ordinary electric bulb.—EDITOR.)

Dissolving a Compressed Spring

Editor, SCIENCE QUESTIONS AND ANSWERS:

In reference to the question in your May issue of WONDER STORIES. A brass spring is compressed and tied with a platinum wire and immersed in sulphuric acid. When the spring is entirely dissolved, what becomes of its former energy in being compressed? You stated that its energy is transformed into kinetic energy and later into heat energy in the liquid.

Am I to understand that if the same brass spring, not compressed, was immersed in sulphuric acid, that less heat would be generated than in the case of the compressed spring?

FRANK MORRISON,
Indianapolis, Ind.

(Naturally, the compressed spring, when dissolved, would give off more energy than one that is not compressed. It took energy to compress the spring, and this energy must be released when the spring dissolves. —EDITOR.)

The Law of Inverse Squares

Editor, SCIENCE QUESTIONS AND ANSWERS:

Will you kindly give an explanation of the law of inverse squares?

Will you also define the resulting action when a projectile is fired from a body moving in the opposite direction at an equal speed?

A. W. BENNETT,
Parker, Colorado.

(The law of inverse squares is generally accepted as pertaining to mutual gravitation between the bodies of the universe. The amount of gravitational pull of one body on another affects the orbits of both and allows astronomers to calculate the weight of the involved bodies. The process is greatly complicated and too technical to discuss here. Just as the earth's gravitational pull keeps the moon in its orbit, so the sun keeps the earth and the other planets in their various orbits. The law of inverse squares not only pertains to the worlds of the universe, but also to atoms (where the nucleus remains stationary in relation to the flying electrons, as the sun does in relation to the planets) and to the way that the apparent brightness of stars decreases with their distance.

The subject you mention in your second paragraph has been discussed very often in our columns. The

object you mention that is fired at the same speed as the vehicle, but in the opposite direction, would fall to the ground, the vehicle drawing away from it.—EDITOR.)

Space Travel

Editor, SCIENCE QUESTIONS AND ANSWERS:

Since I started reading WONDER STORIES two years ago, I have become a great enthusiast of interplanetary travel topics. Now I have been asked by the science society to which I belong to give a lecture on this fascinating topic. I have therefore come to WONDER STORIES for aid in getting some notes on which to talk. So I would be very much indebted to you if you would either return some information in the stamped, addressed envelope I have enclosed, or at least publish a few notes in the science corner for me. I have in my possession some information taken from WONDER STORIES in the *Science Questions and Answers* of the months June, 1930, November, 1931, April, June, and August, 1932. I thank you in advance, for I am sure you will help me.

W. MERKEL.
London, England.

(In the July, August, and September, 1929, numbers of "Science Wonder Stories," we published a series of articles on "The Problems of Space Flying," by Captain Hermann Noordung, A.D., M.E., of Berlin. We will here outline briefly a few of the things brought out by him.

In the first place, a person would be weightless in space, which may cause trouble because of the fact that certain important groups of muscles would atrophy due to disuse, and would probably refuse to function when the traveler once again came under the influence of gravity. In this weightless condition, it would be necessary, or at least advisable, that all rooms be well padded and all sharp corners eliminated, for the traveler would be free to fly in any and all directions unexpectedly at the slightest clumsy motion.

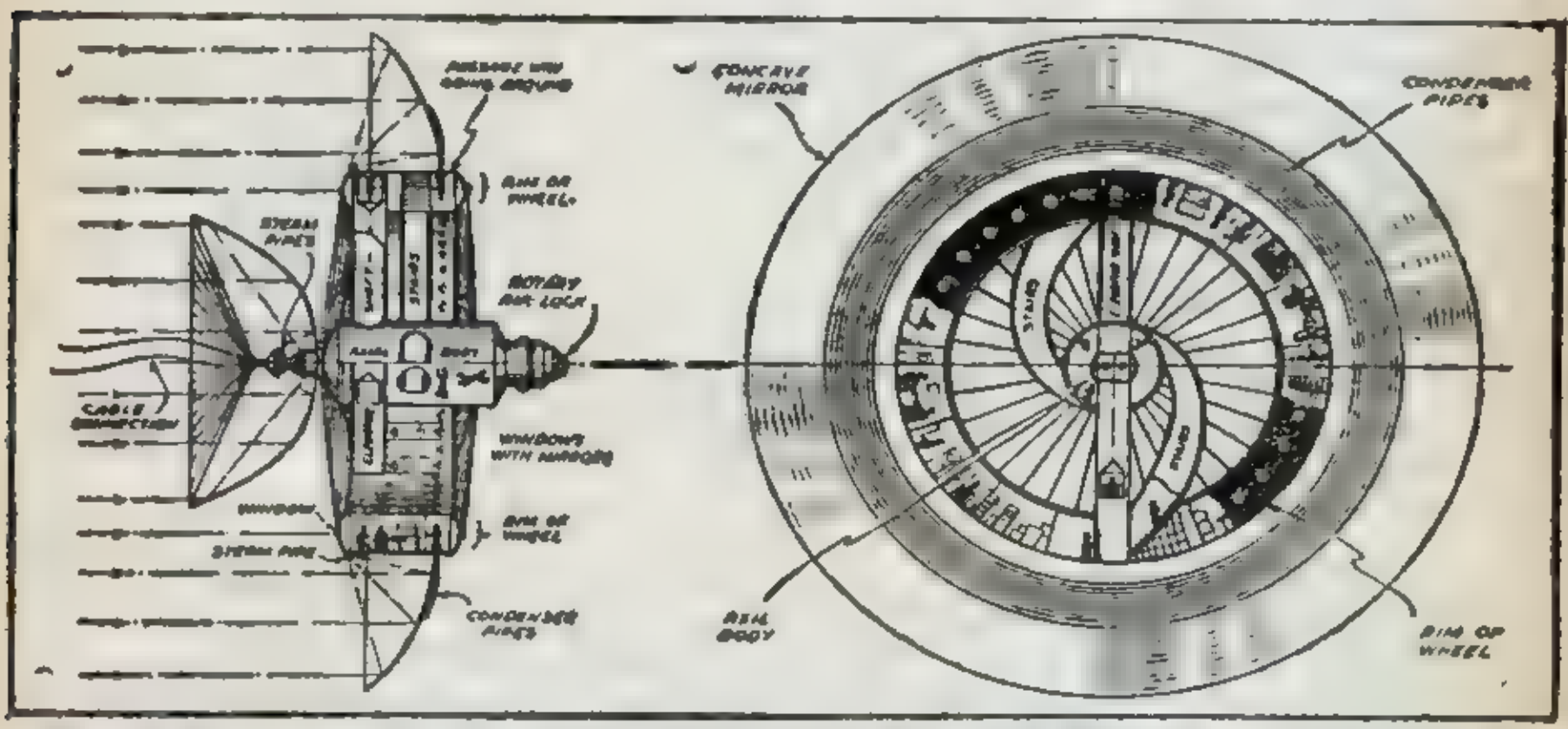
Water in a ship in free space would form into globules when it was forced out of the container and remain suspended almost motionless in mid-air. Speaking of the weightless bodies in the ship, they would still obey the law of mass attraction, and would gradually be attracted toward the common center of gravity. This motion would be so slow, however, that objects would take hours to travel a foot, if unaided by outside forces. So, all things that were not fastened down, would eventually meet on one of the walls, and, if the speed of the object is great enough, it will float back and forth between the walls until it gradually slows to a stop.

Eating in a weightless space-ship would not be a great difficulty, once the food was in the mouth, as the actions of the digestive organs are independent of gravity.

The universe, from a space-ship, would look entirely different than it does on the surface of the earth. In airless space, stars would not twinkle or look pointed. They would be tiny but extremely bright dots. Sunlight would not be diffused as it is in our atmosphere, but the sun would be incalculably brighter and would blind one to look at it, while the surrounding universe would be bright from myriads of stars that cannot be seen by us because of the atmosphere.

The lack of air in space would also signify the lack of sound. A terrific explosion a hundred feet distant from the traveler's ship could not be heard, as the sound vibrations would have no medium to reach his ship.

Captain Noordung's article goes on to discuss the possibility of creating an observatory in space to gather in the rays of the sun and transform them into energy to be used as power. The accompanying



The above illustration is adapted from one in the August, 1929, issue of "Science Wonder Stories. This shows two cross-sections of the rotary house in space as conceived by Captain Hermann Noordung, A.D., M.E. of Germany. At the left is the end view showing the concave mirror and the rotary house proper. The living quarters are near the outer edge of the building, the rooms being built along the rim. A stairway and elevator connect with the axial body and the air lock which one uses to go out into space or return to the building. At the right is a view of the side that faces the sun. The structure is arranged in the form of a great wheel because the centrifugal force is greatest on the circumference.

illustration is reprinted from the August, 1929, issue of "Science Wonder Stories" and shows Captain Noordung's idea. The subject of interplanetary travel is one that allows infinite discussion and conjecture, though nothing practical may result for a long time. —EDITOR.)

Specific Gravity

Editor, SCIENCE QUESTIONS AND ANSWERS:

Will you please publish the list of chemical elements with their specific gravity?

R. LEVY,
London, England.

(We published a list of the chemical elements in our July-August, 1933 issue with their symbols. To reprint the list here with the atomic weight [specific gravity] of each would take too much room. We refer you to the physical table released by the Smithsonian Institute. The atomic weights range from 1.0078 for hydrogen, the lightest element, to 238.14 for uranium, the heaviest of the ninety-two elements. You can see by this the range that the elements cover. The heavier the element, the greater its atomic weight, or specific

(Continued on page 924)

The Reader Speaks

IN this department we shall publish every month your opinions. After all, this is your magazine and it is edited for you. If we fall down on the choice of our stories, or if the editorial board slips up occasionally, it is up to you to voice your opinion. It makes no difference whether your letter is complimentary, critical, or whether it contains a good, old-fashioned brickbat. All are equally welcome. All of your letters, as much as space will allow, will be published here for the benefit of all. Due to the large influx of mail, no communications to this department are answered individually unless 25c in stamps, to cover time and postage, is remitted.

January the Worst Issue

Editor, WONDER STORIES:

What is wrong with WONDER STORIES? The January issue is the *worst* one that I have seen in a long time. The stories themselves are good. They are written well, and the plots are original, but there is something missing. At first I thought that they didn't have enough pep, enough action; but upon analyzing each story, I found that I was wrong. It seems to be some indefinable *spirit* that only experienced authors can put in. Something that leaves an impression after you have finished reading. I have just read John Taine's "Seeds of Life" for the second time, and it thrilled me just as much as the first. It illustrates what I mean.

J. Harvey Haggard tried something big in "Evolution Satellite" but—I don't know. Maybe it's because I read it when I was sick in bed, but it didn't seem to click. This goes for the whole magazine. Also, maybe it's because I'm getting case-hardened by years of reading, but when I read old magazines now, I still get a thrill.

Here is what I would like to know. Where are all the old authors—Edmond Hamilton, Gawain Edwards, Edsel Newton, Ed Earl Repp, Dr. Keller, Hari Vincent—I could go on like this for paragraphs, but I especially want something really gigantic, colossal, tremendous, enormous, stupendous, et cetera by Dr. Edward E. Smith or John W Campbell, Jr. (Remember the Skylark stories and Arcot and Morey?)

And how about reviving the old comics -Hick's Inventions, and those others that were printed about the same time. And maybe Mr. Gernsback can give us some more "Scientific Adventures of Baron Munchausen."

Since we are on the subject of old stories, a long time ago there was one called "Rice's Ray" "Today's Yesterday" in the latest issue was written by a man named Rice Ray???!

Paul still is keeping up his good work. I can't help praising his covers in every letter. The other artists can't compare with him. I think the illustration has a great effect upon the story. A good story can be spoiled by a poor illustration. That's what happened to "Garfield's Invention." Paul could have done much better, and thereby the story would have had a much better effect. In contrast, see what Paul did for "When Reptiles Ruled." That illustration is one of the best ones he has done for some time. He is losing his old style, however. I wish he drew like he did in 1928 and '29.

After an interval of some time, we have another science-fiction movie, *The Invisible Man*. It has at last appeared in this city. Another horror picture! Is *Automaton*, which I hear they are making, the same story which appeared in another magazine a couple of years ago?

I ought to get the prize for spreading science-fiction. In every composition I write for school, I manage to get some science-fiction. I get good marks for them, too. For a book report, I am doing *The Invisible Man*. In the astronomy club, I gave a talk on space-flying, and I hope I can get them to have a panel discussion on some such subject.

MILTON S. ROTHMAN,
Philadelphia, Pa.

(We do not wish to comment on this letter until you have read the following one, which starts off in direct contrast.—EDITOR.)

January the Best Issue

Editor, WONDER STORIES:

I have just finished reading your January issue, which is the best one I have ever read. I think the small size is O.K.; the edges are magnificent; the paper just makes me yell with delight; the editorials are a perfect conglomeration of undiluted reason and the stories!—ah, these marvelous creations of the supreme minds of science-fiction! 'Nuf said!

Here's my rating of the material in the January issue:

(1) "The Exile of the Skies"—E. Vaughan—swell start.
(2) "Evolution Satellite"—J. H. Haggard—unusual ending.
(3) "The Reader Speaks"—always good.
(4) "Science Questions and Answers"—useful and [illegible] facts.
(5) "The Man From Ariel"—a different type of short story
(6) "When Reptiles Ruled"—O.K.
(7) "Garfield's Invention"—A new ray; tastes good.
(8) "Moon Plague"—So help me, Plant-men!
(9) "The Secret of the Microcosm"—An old plot.
(10) "Today's Yesterday"—Too radiomque for me.
(11) "Impressions of the Planets—Venus"—I don't like poems.
(12) "The Riddle"—I dislike rhymes.

Now for the cross-examination. *Who is Epaminondas T. Snooks?!?!?!* Please give me the dope on him. I have nearly gone nerty over the question. Also, how does a would-be author write and mail his manuscript, how much do you pay for stories you accept, and what kind of stories do you want?

WILLIAM J. MEIKLE,
Harrisburg, Pa.

(Mr. Rothman opens his letter saying that the January issue was the *worst* one and Mr. Meikle opens his stating that it was the *best*. Now which one are we to believe? By the trend of other letters sent in, we must side more with the latter.

Mr. Rothman: You seem to hit the idea in your second paragraph where you state that the January issue appears to be poor because you are case-hardened. It is a very frequent occurrence for a reader to become tired of science-fiction for a short while from an overdose. But he invariably comes back to the fold before long. However, even though you become tired of present day material, you will always like the first stories that you read—they leave pleasant memories that time cannot erase, because they were so novel when you first read them that they can hardly be surpassed in your mind. Does this settle the case? Edmond Hamilton, Dr. Keller, and many of the other old authors are still writing for us, but we prefer to give the new writers a chance to show you what they can do. As for comics—we've plenty of them on hand. The last thing we heard about the picture *Automaton* was that they had put the story on the shelf and ceased production.

Mr. Meikle: Snooks snooked away again recently, but every time we catch him, we bind him to a chair and torture him into writing another story. We suggest that you write to us asking for our *Suggestions to Authors* mentioned in the January issue. —EDITOR.)

Sequel Seconded

Editor, WONDER STORIES:

You were sure right about demanding a sequel to "Today's Yesterday," by Rice Ray. He certainly knows how to write. The story was—to use slang—peachy. I can't comment upon the other stories, as I haven't read them yet. But—don't forget that sequel.

NORMAN MILLER.
New York, N. Y.

(We hope that Mr. Ray reads this brief letter and favors us with the required sequel. This is not the only request we have had for it.—EDITOR.)

"Exile" a Hit

Editor, WONDER STORIES:

May I drop a line of congratulation for the story starting in the current WONDER STORIES—"The Exile of the Skies." New—absorbing, with novel angles—it is a delight. I was so disappointed in the rest of the stories—"The Man From Ariel" got nowhere—neither did "Today's Yesterday" nor "The Secret of the Microcosm" although these last two started well and had fine ideas—but it seemed the authors simply gave up. "When Reptiles Ruled" is suitable for a child's primer. The rest of the stories might just get by. But this new serial is Ace High. Vaughan evidently is a writer of depth and of thought. He has built carefully and constructed sensibly and consistently and logically. I am looking forward interestedly to further developments in the story and in him as an author.

GERTRUDE GORDON.
New York City, N. Y.

(We are very glad that you like the current serial and are sure that many of our readers will acclaim it greater than the so-called "classics." The rest of the letter should signify that we do not pick out the complimentary letters for these columns, but print only ones that are of interest. We are willing to do this, but the writer must be able to "take it," for you will find many of our readers to disagree with you when you denounce any of our stories, though we at all times shall remain neutral.—EDITOR.)

Praises Before It Is Read

Editor, WONDER STORIES:

Say, I *certainly* am hepped up about your January WONDER STORIES. Haven't read a story yet—mag just got here—but your issue possessed of a new policy is Better. Oh! What an improvement over the December number—stories and everything. I haven't read a story, true; but the cover's got that *something* to it, and I am just crazy over it. I still don't like the idea of prospective horror stories in the mag, but I tell you, I *know* I'll *enjoy* this month's contents before having read them. The "pre-vues" of all of them are so good. And there is so much. "Exile of the Skies" *must* be good. Oooh, "The Man From Ariel" looks different, and ditto "Today's Yesterday." And I'm sure I shall like "When Reptiles Ruled," and my heart will delight in knowing "The Secret of the Microcosm." And finally, even if I won't like the "Moon Plague," there is another translation—"Garfield's Invention." And altogether, I'm telling you you don't know how good this number looks to me. Oh, my letter printed too—thanks. And I have my eye on "The Last Shrine" and "The Vengeance of a Scientist"; and "Druso" and "Xandulu"!!!

FORREST J. ACKERMAN,
San Francisco, Calif.

(This is a most unusual letter. Mr. Ackerman is super-enthusiastic even before he has read the discussed issue. We know a little of the inside story concerning him—how he keeps constant correspondence with dozens of science-fiction fans and has the most complete and unique collection of this type of literature. Perhaps he knows what's good even before he has read it. You will see by other letters in this issue that what is one fan's meat is another's poison. However, there is more meat than poison.—EDITOR.)

Our Hackneyed Stories

Editor, WONDER STORIES:

In the past I have mailed you more or less worthy letters for your "Reader Speaks" department, but they have not been printed. However, I earnestly entreat you to print this one, since I am interested in both the editorial comment and the opinions of other readers concerning the suggestions I am about to advance.

I will start out with the more or less time-worn accusation that your stories are degenerating, at least as regards science. Rocket-ships roar out to Mars and back with hardly a hint as to the dangers and difficulties of astronautic travel and how they are overcome; robots of all sizes and shapes stalk through your pages without the details, possibly cumbersome, certainly interesting, of what makes them tick; ray-guns flicker and flash with a minimum of explanation. Descriptions of the dwellers on other planets are almost childishly simple; and the fact that they are almost invariably only a modified form of man is an insult to the reader's intelligence.

Another favorite of your authors, this time in regard to plots, is the old, old idea of saving the earth from an invasion of far superior creatures; sometimes involving interplanetary wars of curiously hackneyed description and waged by such gigantic fleets that one wonders how the earth ever raised the money to pay for them and the men to man them.

I began reading this magazine sometime in 1931, I believe, and have since discovered a great many back numbers, and it is my opinion that they show a marked decrease in science since the earlier years of this mag. To be sure, they were not perfect; many of them had too little action, while today, perhaps, we have too much.

To sum it up, the best science-fiction mag on the market is degenerating into a magazine of adventure stories with a scientific background.

My proposal is to inject new life into science-fiction by the adoption and discussion of two fairly new branches of scientific thought. I refer to psychology and more particularly to the sciences of sociology and economics.

Will the cities of the future be built for sensible living or for real estate speculations; what will they be like; how about transportation; what will the next world war be like; what will the results, immediate and permanent, be; will the currency of the future be based on a gold standard, the energy standard of the technocrats or the production of some essential, such as wheat; what will be the scientist's place in the government of the future; how will he achieve it; is democracy through, or just beginning; what would be the effects of the discovery of atomic energy on the coal regions and oil fields . . . . ? Etc., etc.; a million queries pop into my mind as I sit here pounding my typewriter. How about it, readers, what's your opinion?

"The Revolt of the Scientists," a swell yarn, was such a story as I hope for. "The Lunar Consul" gave strong hopes of being one, but then collapsed in the second instalment. Incidentally, just as a suggestion, why not let one of these would-be-reformers-by-force achieve world dominion; the author's treatment of the rest of the yarn would be interesting.

In closing, may I remark that I completely agree with those who condemn time-traveling as impossible, and that a few humorous stories would help a lot. I suggest that Clark Ashton Smith confine his—er—literary efforts to Weird Tales or some such publication. With a final plea that this letter be published, I am signing off.

CHARLES H. DAVIS, JR.,
Bremerton, Wash.

(May we suggest that you read our new policy editorial on page 655 of our January, 1934 issue. There you will find an announcement that we will do our utmost to avoid those hackneyed plots that you mention in your second and third paragraphs. Just pick up your copies of WONDER STORIES beginning with the November, 1933 issue and see how many of the stories in them have time-worn themes. We can assure you that you will find fewer of them in these issues and all those to come than you have ever found before in any science-fiction magazine, including the old WONDER STORIES. Now, this is a strong statement, and we would not make it if it was not our firm belief. Do you still think our magazine is degenerating? We'll bet ten to one that you change your opinion before very long. Many of our readers do not like the works of Clark Ashton Smith because they are of such alien beauty that they are over their heads. Others of our readers have claimed that his stories surpass those of Poe, and we think this a most conservative statement.—EDITOR.)

We Have Improved

Editor, WONDER STORIES:

I am glad to note the improvement in WONDER STORIES of late. Some low grade material is bound to creep in at times, but it is a pleasure to observe the elimination of hopelessly amateurish handling, and the leaving of worn-out, age-tattered plots and themes which marred bygone issues. Best luck for the future.

RICHARD F. SEARIGHT,
Detroit, Mich.

(This letter is indeed gratifying to the editors who try to please. We are pleased to see that you have noticed the change in material after only three issues have been published under our new policy. After all, our readers are already beginning to notice this, and, as Mr. Searight, an author himself, states, the magazine has improved.—EDITOR.)

A Plot Submitted

Editor, WONDER STORIES:

If this letter gets too long or uninteresting chuck it into the wastebasket and read a dictionary. At least you learn something from a dictionary.

I just finished the December issue and it was great. I laid off for a while when money was low but have returned with renewed vigor.

"The Inquisition of 6061" rates first in my estimation. It brings up an entirely new thought—and how! "The Heat Destroyers" was next, only no scientific explanation was given. The others were all good but the same old goods. If I wanted to read about the hero and the villain I'd buy Dime Detective or something equally as cheap.

The new size is fine but the stories are falling down as a whole. I always read Gernsback's editorials first—they're worth more than all the stories put together.

Why do they always have to start a war, or fight some unknown beast? I know there must be a conflict but tell a few of the writers to get a new idea.

Paul is a whiz. Winter has promise of being even better. Why not a few more illustrations to each story; good pictures, not just sketches?

But after all, there is only one thing wrong with the mag. All the rest are personal views of a cranky reader. As soon as I finish my mag (it takes about a half-hour), I wish solemnly and reverently that I had another to read—and it's a long wait till next month.

Here is a skeleton, a bare skeleton, of a story that one of your writers might work up into something that reads like a novel. My science is a little hazy and I'm not even sure this is original, but after I tell it, you use your own judgment on whether to throw it away or not.

I believe it is generally conceded that all things go in cycles. Not motor cycles or bicycles but cycles of time and space. (Maybe I'm wrong, but that is of no matter.) Our sun, I believe revolves around a yet larger sun of which I do not know the name. (I told you it was hazy.)

Now suppose our sun had an orbit in the shape of a parabola, like Haley's comet. (I'm not sure about Haley's comet, either.) But like this comet, our sun swept close to this larger star while completing its rotation and all life on all the planets was extinguished. This would explain the cause of the earth's being purified by fire and the geologists' ice age at the extreme end of the parabola. Life could begin sometime after we circled this star, and human life could begin after the ice age. Of course our solar system would be traveling slower at the farther end but it could gradually accelerate and attain its maximum speed sweeping around this star.

Don't ask why, I'm lucky I got this far. Take it for what it's worth and how much do I owe you.

Merry Christmas and many of them!

I. M. EATON,
New York, N. Y.

(You must realize that every story must have a plot and sequence of events with a definite climax and denouement. Without this, it is not a story. The story must have characters. Each character must do something. If he does something good, he's a hero; if he does something evil, he's a villain. If it's a woman, she's either a heroine or a villainess. Without from one to four of these characters, the story could not possibly hold interest.

Your letter is very refreshing, and we object to your calling your unfavorable comments "the personal views of a cranky reader." Every one has a right to his own opinions. This is a free country and the liberty of free speech is in the Constitution—and we wouldn't want to do anything unconstitutional! You, like many of our readers, appreciate Winter's excellent work.

The plot you mention for a science-fiction story is not new—in fact, it is quite old. Our sun does not revolve around any other sun, and Haley's comet does not have a parabolic orbit.

Merry Christmas to you, too, and a Happy New Year!—EDITOR.)

A Word from an Author

Editor, WONDER STORIES:

Some time has passed since I aired my views on the faults and non-faults of WONDER STORIES. I haven't the regularity of an Ackerman or a Darrow, either in writing stories or in writing letters, but when they do come, they are voluminous enough to make up for the gap.

First: the new size, or the return to a size twice removed. I don't like it—didn't before. It somehow doesn't seem to go with WONDER STORIES as the dressed-up, large size did. But a depression is a depression, and if you are to keep on printing stories you can't be annoyed by a huge overhead at a time when old readers are falling off and new ones are too poverty-stricken to become regular and show on the receipt side of the ledger. After all, except for a collector who tries to bind his issues and have a nice, uniform library without a lot of disappointing ups and downs at odd intervals, what really matters is what is in the magazine.

Quite evidently, WONDER STORIES is still a magazine whose writers can experiment. "The Man Who Awoke" presented the outstanding contribution to science-fiction since "The Time Stream," which was the best since "Seeds of Life," which was the best since the "Skylark" stories, which—but why go on?

Starting with the first of the little issues, it has the quality of the little theater—uniformly good. Messers. Perry, Jacobi, Manning, and Haggard are quarreling over first place. Mr. Fatzer, unfortunately, has undisputed possession of the last—"The Lunar Consul" doesn't live up to its title—isn't unusual or experimental enough. Some day I must write some editor several single-spaced pages on titles whose stories didn't quite come up to snuff. For consolation, the new serial, "Evolution Satellite," does, and has one of Paul's best drawings for a frontispiece, even if the cover illustration isn't as good as some. You can't beat Paul at his best, for certain types of story. The recent reprint of "The Second Deluge," with Morey at the pencil, showed that.

You hit things nicely in your introduction to "The Tomb from Beyond." You will consider stories that are not technically cold-blooded. You have a place for stories that, instead of playing on some quirk of science, try to draw a living picture of life under non-earthly conditions. The only danger is in going too far in any one direction—but it must be very hard to maintain a balance when writers—and readers—have the tendency to stampede toward what seems popular. After all—speaking for the writers—they are trying to make a living, and the blood of that ability is popularity. If I find I can hang on to the job I got recently, perhaps a steady income will permit me to experiment a little more—and become unpopular.

Brickbats: the theory (purely fictional of course) in "Call of the Mech-men" is very, very interesting—but it has one flaw in it. What about the south magnetic pole? As a matter of fact, though I can't quote chapter and verse without taking a day off to look it up, I think both areas have been explored, and while that doesn't exclude the possibility of the buried mech-world, there are no existing compasses which would settle on a spot as small as the one described. Experimental error, you know. That is why Byrd and other explorers circle as they do when their observations tell them that they are at the North or South Pole. They have to cover an area big enough so that they are certain the pole will be *inside it*—an area as big as their error in determining the position of the pole. By camping on the spot and making a long enough series of observations, they could hit it pretty accurately, but in a few minutes or a few hours—no go. Too bad there isn't a nice striped rod sticking out where the axis of the Earth

(Continued on page 924)

MAILING LISTS

Pave the way to more sales with actual names and addresses of Live prospects.

Get them from the original compilers of basic list information—up to date—accurate—guaranteed.

Tell us about your business. We'll help you find the prospects. No obligation for consultation service.

60-page Reference Book and Mailing LIST CATALOG

Gives counts and prices on 6,000 lines of business. Shows you how to get special lists by territories and lines of business. Auto lists of all kinds.
Shows you how to use the mails to sell your products and services. Write today.

R. L. POLK & CO.
Polk Bldg.—Detroit, Mich.
Branches in Principal Cities
World's Largest City Directory Publishers

Mailing List Compilers. Business Statistics. Producers of Direct Mail Advertising.

70 THOUSAND WORD NOVEL

"The Lightning Kid"

—READ—
THIS WESTERN THRILLER
in the
COMPLETE WESTERN BOOK Magazine
MARCH ISSUE
ON SALE Feb. 5th—ALL NEWSSTANDS

CLASSIFIED ADVERTISEMENTS

Advertisements in this section are inserted at the cost of ten cents per word for each insertion—name, initial and address each count as one word. Cash should accompany all classified advertisements unless placed by a recognized advertising agency. No less than ten words are accepted. Advertising for April, 1934, issue should be received not later than February 4.

[illegible]

SONGWRITERS! Poems, melodies. Amazing opportunity. Hibbeler, D159K, 2104 Keystone, Chicago.

PERSONAL

EPILEPSY—Epileptics! Detroit lady finds complete relief for husband. Specialists, home—abroad, failed. Nothing to sell. All letters answered. Mrs. Geo. Dempster, Apt. H, 6900 Lafayette Blvd., West Detroit, Michigan.

Learn to Hypnotize!

Course of Hypnotism, Mind Reading, Magnetic Healing. 25 lessons. How to become an expert. Hypnotize at a glance, make others obey your wishes, overcome bad habits and enemies; gain in power, wealth, love. Simple, easy system. Equals $20.00 course ONLY 50c. Send stamps or money order.

CROSS COMPANY, 248 Fulton Street, BROOKLYN, N. Y.

SCIENCE QUESTIONS AND ANSWERS

(Continued from page 920)

gravity. Mercury, the heaviest liquid, has an atomic weight of 200.61, which is a great deal heavier than many of the metals.—EDITOR.)

A Broad Question

Editor, SCIENCE QUESTIONS AND ANSWERS:

Kindly give some information on the Solar System, particularly information on moons.

EUGENE BRADY.
Bronx, N. Y.

(You give us a very broad question to answer. Please, when submitting inquiries, make them as specific as possible so that we can answer them accurately. You will find that we include more information concerning astronomy than any other subject in this department. We may offer you a few general facts here, however.

There are nine planets. They are, starting with the nearest to the sun: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune, and Pluto. Mercury is the smallest in the solar system, and Jupiter the largest. In the huge gap between the inner and outer planets (between Mars and Jupiter) are the asteroids, which some believe to be the remnants of a former planet which had somehow been destroyed.

The number of satellites for each planet are: Mercury, none; Venus, none; Earth, one; Mars, two; Jupiter, eight; Saturn, ten; Uranus, four; Neptune, one; Pluto, none discovered.

The orbits of most satellites are almost exact circles, except for our own, which has an unusual, elliptic one. There are many interesting facts in connection with the moons of Jupiter, especially the frequency of their eclipses and transits. Through small telescopes four of the satellites can be seen revolving around the planet. When one of them passes behind the planet or the planet passes between it and the sun, it disappears; in the latter case, because they only shine by reflected sunlight, as the planet Jupiter itself, and the reason for its disappearance in the former case is obvious. When the moons pass across the surface of the planet, small round shadows can be seen on the bright surface of the world. These occurrences are called eclipses.

If you are very much interested in astronomy, you will find many good books on the subject in any public library.—EDITOR.)

THE READER SPEAKS

(Continued from page 923)

should be, so that they could shinny up and tack on their flags. The chances are the first American on the spot would saw it off and bring it home for a souvenir.

In the December issue, "Invisible Monsters" stands out like a sore thumb—or, perhaps, a better simile would be a Russian medal. It sparkles—like the medal, not the thumb. Even if the story itself were poorer, the writing would redeem it. If he is English, as would seem to be the case, Mr. Harris may be able to become the Dorothy Sayers of science-fiction. There may not be enough mystery fans in your audience to catch the reference, but Miss Sayers excels in a glorious combination of characters and plot which cannot be beaten—living people in a living story—and that is what science-fiction needs.

P. SCHUTLER [illegible]
Scotia, N. Y.

(Mr. Miller's letters, like his stories, are always very interesting. We are glad to get your opinion on the new WONDER STORIES. We have returned to the small size because the majority of our active readers have demanded it—'nuf said. You mention a flaw in "The Call of the Mech-men." Naturally, a little inconsistency must leak into a good tale now and then, but there was nothing really scientifically impossible in the story—we are guarding against it. We would be pleased to receive your future science-fiction efforts when you find time to compose them. We have not heard from you lately.—EDITOR.)

"Deluge"

Editor, WONDER STORIES:

Immediately after seeing the motion picture version of S. Fowler Wright's "Deluge," I sat down in front of my typewriter and tapped out this message.

I ask—in fact, I demand, that all true science-fiction fans see this stirring picture. I know they'll like it. In my own case, for example, I wanted to shout, to tell everybody that I was a science-fiction addict. I was as proud of *Deluge* as if it were my own achievement.

The section of the film portraying the destruction of New York is particularly impressive. To see the towered grandeur of the greatest city in the world topple to dusty ruins, to see it buried beneath tons of seething, roaring ocean, is the most awe-inspiring part of the fantasy. To see great ships tossed about by the gigantic waves that envelope New York, to see the earth slide and shift like a soul in agony, to hear the reports of the world-wide cataclysm coming over the radio, is breath-taking.

I have tried to set down my impression of *Deluge*. Maybe I have succeeded; maybe not, but in closing, I again urge all science-fictioneers to see this marvelous production.

VERNE WELLS,
Queens Village, N. Y.

(When we saw the picture *Deluge*, we were as delighted with it as you are. It was truly an excellent science-fiction movie with some colossal scenes. *The Invisible Man* is now making the rounds, and we hear that the producers are now making some others of this type including others by H. G. Wells.—EDITOR.)

A Rooky Reader

Editor, WONDER STORIES:

I don't like the new size. To the average man it puts it in the dime novel class and I'm sure your readers do not want that. Except for that, I have found little cause to complain of your magazine. I have been reading WONDER STORIES since the January, 1933 issue and am glad you changed to the 25c size. I hope that you don't have to combine issues again in the near future.

As for Clark Ashton Smith, he has the right idea of our existence on another planet but it doesn't make a good story. I hope to see more of the works of Laurence Manning, Nathan Schachner, John Beynon Harris and D. D. Sharp. "The Man Who Awoke" and "The Revolt of the Scientists" were exceptionally good stories, and I hope that authors will write more series like these.

Paul is doing fine, but as for your other illustrators (some of them) you had better stick to Paul. On the whole, your magazine is doing well and I'll stick to it in the future. With compliments for the editor and editorial staff.

JAMES POMERANZ,
Chicago, Ill.

(We have not found that our new size makes the magazine appear dime-novelish. After all, it is not the format of the magazine that builds up its circulation, but the merit of the contents. "The Visitors From Mlok," the story you refer to by Clark Ashton Smith was masterfully composed and could hardly be executed by an author of lesser ability than he. There has probably never been a story that portrayed the utter alienage of a foreign universe nearly as well as this one. How do you like the work of our artist Winter? We have decided to keep him along with Paul because of the deluge of favorable comments that has come in concerning his work for our magazine. We thank you for your compliments for the editorial staff. We are indeed grateful that our humble efforts are being appreciated.—EDITOR.)

(Continued on page 930)

Coming May Issue:

"DRUSO"

By Friedrich Freksa

ANATOMICAL MANUAL

THE LIVING BODY
Male and Female

The Only Popular-Priced Anatomical Atlas Published

Only $2.00

A UNIQUE NEW MANUAL OF SECTIONAL ANATOMICAL CHARTS AND ILLUSTRATIONS PREPARED BY MEDICAL EXPERTS.

This new book shows the human body with each aspect of its structure in separate sections; the exact [illegible] of all organs, every bone, muscle, vein, artery, etc.

LIST OF PLATES

Plate		
"	I.	Nude Adult Female
"	II.	Nude Adult Male
"	III.	Nervous System of Female
"	IV.	[illegible]
"	V.	Muscular System (Posterior)
"	VI.	Muscular System (Anterior)
"	VII.	Vascular System
"	VIII.	Respiratory System
"	IX.	Digestive System
"	X.	Male Genital Organs in Detail
"	XI.	Female Genital Organs in Detail
"	XII.	Cross-Section of Pregnant Female Body with Child.

All plates [illegible] feet high) are printed in actual natural colors.

Thus far, plates such as these presented here have been so high in price as to be inaccessible to the public. Our plan in producing these charts is to make them available to every adult person.

The book is 14 inches high and 8½ inches wide. [illegible] tains twelve full-page color plates and twelve text pages illustrated with fifty photographs and drawings, [illegible] from actual photographs, and all organs and parts of the human body—male and female—are shown in great detail in natural colors.

Opposite each page, an explanatory text is provided, illustrated with photographs and drawings to show in detail the different organs and other features of the human body. The book is recommended for nurses, art students, for lawyers for use in litigations, lecturers, physical culturists, hospitals, sanitariums, schools, colleges, gymnasiums, life insurance companies, employers' health departments, etc.

But every man and woman should own a copy of the **ANATOMICAL MANUAL** for effective knowledge of his or her own physical self!

It is of inestimable value to the prospective mother, because of the information it provides on the essential anatomical facts of pregnancy and the structure of the female genital organs.

Money Refunded If Not Satisfactory

MAIL COUPON TODAY!

GRENPARK COMPANY, Dept. WS-334
240 Greenwich Street, New York, N. Y.

Gentlemen:—Enclosed find $2.00 (Foreign and Canada remit by International money order), in full payment for a copy of the ANATOMICAL MANUAL, as per your offer.

Name .....

Address .....

City ..... State .....

$1,000 to $5,000
CASH
For a Few Pennies a Day!

Present Conditions Demand Greater Security for Home

The safety of our families and homes is continually in the minds of all of us in these times. The Union Mutual Life Company of Iowa gives you the one sure means of guaranteeing the necessities and comforts of life for your loved ones—sure, dependable financial help to fall back upon, no matter what happens.

Now, at last, you may BUY exactly the kind and amount of life insurance you NEED for the protection of your family, right in your own home, without high-pressure salesmanship and without medical examination or fees! Thus you will either SAVE all these costs, or you may BUY MORE PROTECTION for less premium!

The new history-making life insurance policy, issued exclusively by the Union Mutual Life Company of Iowa enables you to put every penny of your investment into PROTECTION for your loved ones—giving you the very MAXIMUM of dependable protection for lowest premiums, less all agents' commissions and medical fees!

Why not make up your mind RIGHT NOW to see for yourself exactly what MODERN life insurance means to you and your loved ones? Fill in and mail the coupon below. By return mail you will receive for FREE INSPECTION, one of the new Union Mutual Life policies, which, for only a few pennies a day, pays life insurance benefits of $1,000 and accident benefits of $5,000, including loan service, endowment additions, generous dividends, disability benefits and paid-up features. A standard, full-coverage legal reserve policy at nearly "net" cost.

Ask yourself this question, please: "Why shouldn't I profit by these remarkable new life insurance advantages which are created for my special benefit and service?"

Fill in the coupon below and mail today! No red tape—no medical examination and no agent will call. ACT TODAY! See the benefits of this remarkable new Union Mutual Life policy! Let us PROVE TO YOU, without one cent of expense or obligation to you that it is, indeed, the greatest life insurance offer ever made.

----------COUPON----------

Union Mutual Life Company *of Iowa*,
Dept. 218
Des Moines, Iowa.

Please send me one of your FREE policies to look over.

Name .....

Address .....

City ..... State .....

Fill in this coupon and mail today!

THE READER SPEAKS

(Continued from page 925)

A Convenient Magazine

Editor, WONDER STORIES:

I am writing these few lines just to let you know that, in my opinion, you have made a change for the best. WONDER STORIES once more is a convenient magazine. I feel almost certain that its success will continue. "*Long live* WONDER STORIES!"

RAYMOND PERL MARINELLA.
Philadelphia, Pa.

(Your enthusiasm over our new format confirms our belief that, as you say, the change was for the best. WONDER STORIES is now being issued in a handy size that can easily be slipped into your coat pocket, and the quality of the stories, according to popular opinion, has improved.—EDITOR.)

A Satisfied Reader

Editor, WONDER STORIES:

I have been reading your stories for quite a long while, and enjoy them very much. I just want to say a few words about "our" magazine. Without a doubt, I think you have the best magazine on the market. Your stories have just the right amount of science in them not to make it hard for the reader to understand.

JACK I. LONG.
Louisville, Ky.

(Our modesty almost prevented us from publishing this short-short letter. It fills a gap between the longer ones and we feel that it reflects the opinions of many of our readers that do not write in [illegible] comments.—EDITOR.)

Our Format

Editor, WONDER STORIES:

WONDER STORIES in its new form pleased me very much, as, I assume, it has many others. It is so easy to read with its new size, and now fits on the shelf with the rest of the library. There is still one thing I disapprove of, however. I think you should throw out that absolutely *rotten* cut, heading the table of contents. I hope other readers having the same opinion will vociferate their objection soon. I do not know which artist drew it, but it is certainly a discredit to his work. Why not fill this space with a good picture depicting a future space-liner such as was on the cover of the July-August, 1933, issue? I think that was the best, most thought-stirring picture for a science-fiction magazine that I have ever seen. Congratulations to Paul for his work!!!

Let's have more from A. Rowley Hilliard, Laurence Manning, Sidney Patzer, J. Harvey Haggard, P. Schuyler Miller, and Festus Pragnell.

PAUL J. SYKES,
Vancouver, B. C., Canada

(Yours is the first objection we have ever received to the illustration on the contents page. We have, however, received a few letters complimenting us on its return. It was drawn as a symbolization of science-fiction, and a careful study will bring that conclusion. If there are others of the same opinion, as you assume, we wish they would let us know that they do not like it. If we receive enough objections, we will do away with the cut you mention.—EDITOR.)

Send your comments in to
"THE READER SPEAKS"
—We will respect your opinions.

An Annual Wanted

Editor, WONDER STORIES:

Paul's drawings are always topnotchers, and the stories he illustrates make the greatest magazine in existence. Even the paper it is printed on is good. Since WONDER STORIES QUARTERLY has been discontinued, why not put out a WONDER STORIES ANNUAL? A year on the newsstands should have such a magazine sell enough copies to make it pay. In it you could have the following make-up: one book-length reprint and several new novelettes and short stories. Of course, Paul would do the illustrating. The price could be 50c for twice as much reading material as in the monthly.

JACK DARROW,
Chicago, Ill.

(We may make an announcement soon concerning the return of the QUARTERLY, or the issuance of an annual.—EDITOR.)

New Zealand Speaks

Editor, WONDER STORIES:

I have been a regular reader of WONDER STORIES for over two years now and would not be without it. I think it is an excellent magazine, and very well arranged. Out here in New Zealand it costs me about three times as much as it does in America; but in my opinion, it is well worth the money. I am very much interested in science-fiction and spend my time collecting all the magazines I can. When it comes to aviation, however, WONDER STORIES has to take second place. How about organizing a competition for overseas readers? I should think it would take on O.K.

LES WATERHOUSE,
Auckland, New Zealand.

(We have many readers in New Zealand and are glad to see that you like the magazine so much. As to aviation, our magazine can not specialize or overemphasize one subject, and the aviation we have today offers little opportunity for science-fiction. —EDITOR.)

SEXOLOGY

THE MAGAZINE OF SEX SCIENCE

SEXOLOGY, foremost educational sex magazine, is written in simple language and can be read by every member of the family. It is instructive, enlightening—not a risque book—contains no jargon. Devoted to Science of Health Hygiene.

Contains 25 important articles on Sex Science, 68 pages, with attractive two-color cover. Here are a few of the more important articles:

Extra Breasts in Women (Illustrated); Pregnant Grandmothers; Deserties — The Great Enemy (Illustrated); An Embarrassing Female Complaint; The Prostate Gland (Illustrated); "Safe" Periods of Women; Sex Defect of Louis XVI; Syphilis and Heredity; The Fourth Sex; Proving Parentage; Incest and Its Origin; Gland Transplantation; Premature Sex Development; Dangers of Delayed Marriage.

Get a copy of SEXOLOGY on any newsstand, or if your dealer cannot supply you, send 25c in stamps for a copy of the current issue.

SEXOLOGY 25T West Broadway New York, N.Y.

The BEAST of DEATH

CAROLYN WELLS'

New Novel

Read this thriller

in the

BLACK BOOK DETECTIVE

MAGAZINE

MARCH ISSUE

10c NOW ON SALE AT ALL NEWSSTANDS 10c

How You Can

MAKE MONEY

At Home!

Substantially bound —140 pages of priceless information.

If you are a victim (man or woman) of the recent economic depression—or a woman who wants to add to the family income—or a man or woman beyond middle age and dependent upon others—or a recent college graduate not yet located—or a student wondering how to earn your year's tuition—or a boy or girl desirous of turning your spare time into money—no matter who you are, if you have exhausted your resources and must earn money—this book will prove a sound and helpful guide to you.

The 1,000 practical, money-making plans outlined in its pages were not created out of the imagination. They are true reports of what thousands of people are actually doing at the present time to earn extra money. The plans have been tried, and have been found practical, successful and profitable.

Authentic Sources

Says the author regarding this remarkable and timely work—"Exhaustive and painstaking research was necessary to obtain the 1,000 money-making suggestions comprising this book. Every available source was tapped. Special thanks and acknowledgment is extended to the U. S. Department of Labor, the Bureau of Home Economics, the Children's Bureau, the Office of Education, the Department of Agriculture, the Department of the Interior, the Congressional Library, and the Superintendent of the United States Government Printing Office for supplying the writer with all available documents, bulletins and publications."

Written to fill an immediate and pressing need, this exhaustive compilation and description of over one thousand ways to turn spare time into money is now available to everyone needing it. No matter what your state or condition, age or sex, it will offer at least one and probably many suggestions which you may be able to turn quickly into money. It has been priced so as to be within the reach of all—$1.00 postpaid in the United States and Canada—to foreign countries, $1.25. Order today before the supply is exhausted.

GRENPARK COMPANY

245 Greenwich Street New York, N. Y.

Use the Coupon Today

Grenpark Company,
245 Greenwich St., New York, N. Y., Dept. WS

I enclose $1.00 for which please send me a copy of 1,000 Money Making Ideas. I understand that my money will be refunded if the book does not prove entirely satisfactory. (Enclose $1.25 from countries other than U. S. and Canada.)

Name.....

Street.....

Town.....State.....

FRENCH CLASSICS

Daring . . . Romantic . . . Thrilling . . . Absorbing

A SET OF SIX FAMOUS BOOKS — *Former Price* $12.50

NOW ONLY $2.98

WHILE THEY LAST

Complete Set of Six Books

6 Volumes—Standard Library Size—1,447 Pages Bound in Rich Blue Linen-finish DeLuxe Cloth

6 Priceless Volumes

"Sappho" by Alphonse Daudet

"Mademoiselle de Maupin" by Theophile Gautier

"The Lady of the Camelias" by Alexandre Dumas

"The Red Lily" by Anatole France

"Madame Bovary" by Gustave Flaubert

"Stories of Parisian Life" by Guy de Maupassant

THE MOST FREQUENTLY QUOTED AUTHORS!

IF YOU WANT TO BE WELL READ — YOU MUST HAVE THESE CLASSICS IN YOUR LIBRARY

1,447 Pages of Love, Intrigue and Romance

Here are six famous French Masterpieces—collected together, translated into English, uniformly bound and made available in this special edition at an unbelievable bargain price.

Each one of these six books is the outstanding work of its author. Collectively they represent all that is best and most typical in French literature—written as only the French can write.

In times now past, various well-meaning but uninformed people have gone so far as to express the opinion that some of the incidents in these books were almost "shocking" and "risque", but such is decidedly *not* the case. True, the subject matter is handled with all the verve and fire for which the Parisian *raconteur* is famous, but it must be remembered that the French code is not the same as ours. Every nation has its own individual modes, manners and morals, which are bound to be reflected in its literature. Knowledge of these differences is of undeniable cultural value—and to censor them would be fortunately regarded as the height of prudery in this advanced day and age.

Stories that Vibrate with Human Passions

Seldom has such an amazing collection of tales been offered to the public—tales replete with intimate detail, unvarnished truths and daring incidents. Here you will meet a motley assemblage from the highest to lowest—true Parisians and Parisiennes, draining life to the final dregs, laughing, lying, loving, drinking, cheating, and *even killing!* Here you meet noble ladies, their fingers encrusted with jewels worth a king's ransom—*femmes de nuit*, haunting dim streets, their fevered eyes glowing beneath cheap finery—roues, rogues and vagabonds—priests and beggars, virgins and harlots—saints and sinners!

SPECIAL OFFER:

ONLY 220 SETS AVAILABLE AT THIS BARGAIN PRICE

***of* $2.98** *per set*

Can only be shipped by express collect.

If you wish a set—Act now!

No C.O.D.—Money refunded if not satisfactory.

TRUTH PUBLICATIONS, Suite 926, Palmolive Bldg., CHICAGO, ILL.

Enclosed find my remittance of $2.98 for which ship to me by express collect, the set of six volumes of French classics as per your advertisement.

NAME ..... **ADDRESS** .....

CITY ..... **STATE** .....

The THIRD SEX! Man or Woman?

For hundreds of years men and women have talked with hushed voices about "STRANGE PEOPLE"—men who are not men—women who are not women. No one has ever *dared* to talk out in the open about it. Is it any wonder that the shocking, lurid facts of this great social evil are unknown to the great mass of men and women? Is it any wonder that strange nick-names are commonly used to describe these creatures.

A DOCTOR CASTS THE LIGHT OF TRUTH ON THE STRANGE, EXOTIC WORLD OF TWILIGHT MEN AND WOMEN!

Now a Doctor has dared to tear away the veil of mystery. In blunt, understandable words he describes the unbelievable facts. "STRANGE LOVES," A Study in Sexual Abnormalities, by Dr. La Forest Potter, noted authority, is a document so weird, so startling, as to amaze the civilized world. Dr. La Forest Potter, the author, is a late member of the New York County Medical Society, Massachusetts Medical Society, Boston Gynecological Society, Associate Professor of Rhinology, Laryngology, and Otology, New York School of Clinical Medicine, and the author of many well known works.

THE TRUTH REVEALED!

Can you distinguish these men and women of the Shadow World? Do you know that their number is constantly increasing? The strange power these men and women wield over normal people is almost unbelievable. Dr. Potter says, "NO MAN ON EARTH HAS A CHANCE AGAINST A WOMAN ONCE SHE HAS SUCCUMBED TO ANOTHER WOMAN." Actual clinical cases reveal the abnormal ties and the unnatural desires and erotic reactions of these twilight men and women! There are records that actually prove that men have been MADE INTO ABNORMALS. A startling, provocative indictment against the false modesty that has been responsible for the growth of these fantastic, strange amatory curiosities among savage and civilized races.

STRANGE LOVE

Dr. Potter tells about the hidden, secret passions that dominate these women's exotic lives. He talks about the tragic duality of the effeminate man—half man—half woman. He delves deep into the ages—relates the bestialities and savageries practiced by the old Egyptians, Hindoos, Greeks, Assyrians and Romans—the sensuality that was ascribed even to the Greek Gods, to Zeus, Apollo, Hercules and Jupiter—the growth through history from ancient countries to France—to Germany—to its tremendous spread through the United States.

MUST THESE SUBJECTS BE CLOTHED IN SILENCE FOREVER?

Fearlessly, openly, the meaning of many misunderstood subjects is brought under the searchlight of truth. Sadism—Necrophilia—Phallic Worship—Sodomy—Pederasty—Tribadism—Saphism—Uranism—the normal man and woman will refuse to believe that such abnormalities exist and have been practiced through the ages.

ASTONISHING DISCLOSURES ABOUT THE WORLD'S MOST FAMOUS MEN

How many of the famous men of history were considered "odd"? Socrates, Plato, Caesar, Virgil, Oscar Wilde, Leonardo da Vinci, Lord Byron, Tchaikowsky, the musician, Walt Whitman, the gentle, lovable poet, Napoleon—men and women of all kinds in all stages of life.

FOR MATURE, SOPHISTICATED READERS OF THIS MAGAZINE!

This document in book form contains bewildering disclosures and discoveries of a subject that is seldom if ever discussed, that most people know little or nothing about—yet one that deserves the most painstaking and thorough investigation. A limited edition has been prepared for ADULTS ONLY, 256 pages, beautifully bound in cloth, printed on fine paper—for the book lover and collector of rare, esoteric literature. Reserve a copy of this book—the most startling document of its kind—by mailing the coupon.

GRENPARK COMPANY
245 Greenwich Street Dept. WS New York, N. Y.

GRENPARK COMPANY
Dept. WS, 245 Greenwich St., New York, N.Y.

Please send me IN PLAIN WRAPPER a copy of the original edition of Dr. La Forest Potter's book "STRANGE LOVES" — A study in Sexual Abnormality. I hereby affirm that I am an adult person.

[ ] I am enclosing remittance of $2.00. Send book all charges postpaid.

[ ] Ship C.O.D. I promise to pay postman $2.00 plus postage on delivery.

Name .....

Address .....

Town ..... State .....

(We reserve the right to return all orders after this edition is exhausted. Prepaid orders receive preference and will be shipped before C.O.D. orders.) (Canadian and Foreign orders must be accompanied by remittance for $2.25.)

AMERICA TURNS TO MIDWEST!

AMAZING NEW SUPER-DELUXE

16-TUBE ALL-WAVE Radio

(9 TO 2000 METERS - 5 WAVE BANDS)

Is First Choice of Thousands of Radio Fans!

Big FREE Catalog Shows Sensational Radio Values

BEFORE you buy any radio, write for this big new FREE Midwest catalog . . . printed in four colors. It has helped thousands of satisfied customers save from ⅓ to ½ on their radios...by buying *direct* from the Midwest Laboratories. You, too, can make a positive saving of 30% to 50% by buying a Midwest 16-tube de luxe ALL-WAVE radio at sensationally low direct-from-laboratory prices. You'll be amazed and delighted with its super performance! Broadcasts from stations 10,000 miles and more away are brought in . . . "clear as locals." You get complete wave length coverage of 9 to 2,000 meters (33 megocycles to 150 KC.)

WRITE FOR NEW FREE CATALOG

This Midwest ALL-WAVE Radio has FIVE distinct wave bands: ultra-short, short, medium, broadcast and long...putting the whole world of radio at your finger tips. Now listen in on all U.S. programs...Canadian, police, amateur, commercial, airplane and ship broadcasts...and programs from the four corners of the earth. Thrill to the chimes of Big Ben from GSB, at Daventry, England —tune in on the "Marseillaise" from FYA, Pontoise, France —enjoy opera from 12RO, Rome—listen to the call of the Kookaburra bird from VK2-ME Sydney, Australia.

WRITE FOR A FREE CATALOG

Foreign Stations Come In Like Locals

Crawfordsville, Ind. I have heard HVJ, Vatican City, Italy; DJB, Zeesen, Germany; and YV1-BC, Venezuela. I logged stations from Canada to Cuba, from coast to coast. JESSE BALLINGER, 207 Bluff Street.

30-DAY FREE TRIAL PLAN STARTLES RADIO WORLD!

Try the Midwest radio you select from the free catalog...in your own home...for 30 days before you decide. When you see and hear this bigger, better, more powerful, clearer toned, super selective radio you will want to own it—as thousands of other men and women have done.

• • • 40 NEW 1934 FEATURES • • •

See for yourself the 40 new 1934 features that insure amazing performance. These features include: Automatic Select-O-Band, Amplified Automatic Volume Control, 16 New Type Tubes, Balanced Unit Superheterodyne Circuit, Super Power Class "A" Amplifier, 29 Tuned Circuits, Centralized Tuning, 7 KC Selectivity, etc. They are usually found only in sets selling from $100 to $150.

WORLD'S GREATEST RADIO VALUE

$49.50 with New Deluxe Auditorium Type SPEAKER

Recently, the Official Radio News Observer for Pennsylvania reported that his Midwest Super De Luxe 16-tube ALL-WAVE radio maintained contact with W9XZ (Stratosphere Balloon) when other sets lost signals.

NEW STYLE CONSOLES

Write quickly for your FREE copy of the new Midwest catalog. It pictures a complete line of beautiful, artistic de luxe consoles and chassis ...in four colors! Hurry!

TERMS AS LOW AS $5.00 DOWN

DEAL DIRECT WITH LABORATORIES

SAVE UP TO 50%

Buy before the big advance...NOW, while you can take advantage of Midwest's amazingly low prices. No middlemen's profits to pay! You save from 30% to 50% when you buy direct from the Midwest Laboratories ...you get 30 days FREE trial—as little as $5.00 down puts a Midwest radio in your home. Satisfaction guaranteed or your money back. Send for catalog NOW!

MIDWEST RADIO CORP.
DEPT. 464 — CINCINNATI, OHIO, U. S. A.
Established 1920 — Cable Address Miraco, ABC 5th Edition

MAIL COUPON TODAY! FOR AMAZING 30-DAY FREE TRIAL OFFER AND NEW 1934 CATALOG

MIDWEST RADIO CORP.,
Dept. 464
Cincinnati, Ohio.

Without obligation on my part send me your new FREE 1934 catalog, and complete details of your liberal 30-day FREE trial offer. This is NOT an order.

AGENTS! Make Easy Extra Money
Check Here for Details ☐

Name _____

Address _____

City _____ State _____